COLLABORATIVE AOTEAROA

HEALTH CARE HOME MODEL OF CARE EVIDENCE REVIEW

UPDATED JUNE 2022

Collaborative Aotearoa supported by Johanna Thomas-Maude et al

Contents

Executive Summary

This interim report has been compiled as a summary of 21 evaluations available to date on the implementation of the Health Care Home model in practices across Aotearoa, New Zealand. Overall, the model is seen as having a positive impact on both staff and patients/whānau. The key findings have been grouped according to the key values of the reviewed Health Care Home model care (HCH Collaborative, 2020).

Findings

Pūkengatanga

- The investment of time and effort required should not be underestimated
- LEAN processes are improving practice efficiency and teamwork
- Impacts on secondary care may be promising but more time is required to measure effects
- The execution of the HCH model in some practices was affected by COVID 19.

Poipoia

- Not all patients are the same and different services work for different people
- Some HCH tools for routine and preventative care may need revising

Manaakitanga

- Not all practices/PHOs are the same and have different relationships and resources to draw on in supporting change
- Expanded teams have enhanced teamwork and improved continuity of care
- Staff workload may have increased in some cases

Whakapono

- Continuity of care and trust-based relationships are important for Māori and Pacific patients and whānau
- Telephone triage supports continuity of care and managing unplanned appointments, but may not be equitable
- Patient portal is useful for some, but not all

Tino Rangatiratanga

- HCH practices are helping people to help themselves
- People want to become more health literate
- Shared medical appointments are an effective tool that could be used more
- More flexibility is needed to allow the model to be adapted to local contexts

Oritetanga

- Equitable outcomes are not consistently evident
- An 'equity lens' has been further strengthened in the HCH model of care review
- Cultural needs are about more than just ethnicity
- Lower cost is not everything

Kaitiakitanga

- Unplanned appointments are more effectively managed
- Some studies suggest that the model is not truly patient-centred
- Mixed findings in relation to the financial sustainability of HCH practices

Recommendations

Note: Further investigation is required to confirm specifically the benefits of the HCH Model of Care in times of a pandemic. There has been anecdotal evidence that HCH general practices managed better because of HCH attributes such as Clinical Triage, Portal, daily huddles and lean principles (Building Blocks of HCH).

Key recommendations made in the evaluations reviewed for this report include:

- Future planning should account for the significant change required to implement the model
- The HCH model should be reviewed and updated using new evidence
- Targets should be defined by communities
- Patient/Whānau voices need to be better heard
- There needs to be improved equity strategies
- IT use can be explored further
- Expand and embed new roles further to maximise benefits to patients/whānau
- On-going funding is recommended
- On-going education and training are recommended
- High quality, detailed data, including by ethnicity, is required

Challenges and Gaps

Finally, several observations around the challenges and gaps in evidence collection and analysis to date have been noticed, including:

- Studies are from a range of practices with different contexts and at different stages of implementation
- HCH practices must often meet certain requirements before joining the programme, meaning these practices may have higher pre-existing standards before HCH implementation
- Measures of changes in secondary care access must recognise the range of other factors that can affect patients' use of secondary care services
- There are limitations to quantitative analysis due to availability of data
- Some differences can be seen in the findings of self-evaluation reports compared to independent reports and objectivity is an on-going challenge

The Health Care Home Model

The Health Care Home model supports a number of changes from traditional general practice, which are summarised in the following table (Hefford, 2017):

Traditional model of care	Health Care Home model of care
Reception juggles answering telephone calls and greeting patients. Heavy call demand first thing in the morning means some calls go unanswered – but this is not monitored and the number of dropped calls is unknown.	Telephony is physically separated from reception, so reception area is mostly call free. Call volumes are monitored, and staff numbers adjusted to ensure that dropped calls are infrequent. Call volumes are reduced by a switch to online bookings and e-consults.
Reserved 'on the day' appointments are booked until they are full, then urgent requests for appointments are forwarded to a nurse to triage.	GPs have time reserved in the morning to call back their patients – some of whom can be treated by phone; others may be booked in that day or later in the week – sometimes with diagnostics (e.g. laboratory test/X-ray) to be completed before the visit.
Triage nurse organises to double-book urgent appointments in GP template, and tells others to book another day.	On-the-day acute appointments are reserved by each GP, based on forecast volumes, but where clinically appropriate, patients do not need to attend the clinic, saving them time.
Patient calls are taken during office hours by the receptionist who negotiates a mutually acceptable time, balancing the availability of the preferred GP(s) and patient convenience, while also greeting patients presenting at the medical centre.	Patients mainly use an online patient portal to book appointments at a time convenient for them, and provide the GP with information on what the consult is about, allowing pre-work to be done (e.g. laboratory tests) and chaperones, etc. to be organised in advance.
Face-to-face consults at the clinic are the only treatment option available. Repeat scripts require telephone calls, messages and transcription.	Some routine issues are dealt with purely by secure e-consult, avoiding the need for a visit. Patients can also book a telephone (or in the future, a video) consult. Long-term medicines are pre-authorised as repeat scripts and requested through the online patient portal, allowing one click prescribing and note entry.
Patients with complex needs are not identified proactively, resulting in: • no differentiation in booked appointment length • high numbers of reactive visits per year dealing mainly with symptomatic issues.	The practice uses a risk stratification tool to identify complex patients and patients at high risk of admission. Complex patients have a care plan developed and are scheduled visits with appropriate appointment length to manage both current symptoms and to update plan of care.
Relationships with community health services (district nursing, community allied health, etc.) are ad hoc and based on referrals. There is little interdisciplinary care planning or delivery.	The practice regularly meets with local community health services to bolster effective working relationships and uses an interdisciplinary approach where appropriate.

As such, some of the key features of the HCH model include (Hefford, 2017, p. 232):

- Advanced call management
- Consultations over the phone and via secure email
- GP phone triage and clinical management
- Web and smart phone-based patient portals
- Same day appointment capacity
- Enhanced layout and composition of General Practice facilities to support new ways of working with more effective use of physical space
- Extended acute treatment options
- Community Health Service Integration

- Increased hours of access
- New professional roles to expand the capacity and capability of General Practice
- Person-centric (varied) appointment lengths
- Application of lean quality improvement processes
- Care planning for patients with high needs or at risk
- Clinical and administrative pre-work to improve the efficiency of time spent with patients

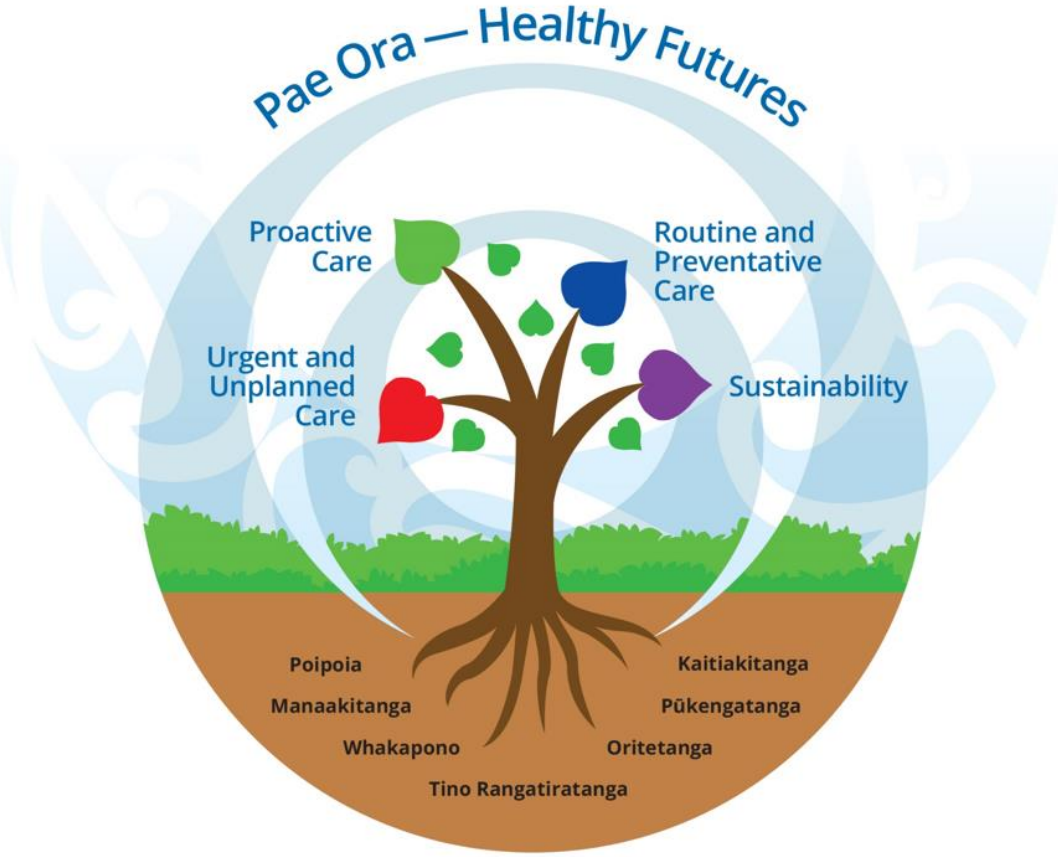
This interim report reviews the evidence compiled on HCH implementation and its impacts to date, across the country. As part of its on-going evolution, HCH Collaborative has recently reviewed their model of care requirements, applying a kaupapa Māori lens, and developing the following seven core values of the service (HCH Collaborative, 2020):

- **Poipoia:** Having empathy and nurturing the provision of quality care for whānau
- **Manaakitanga:** Acknowledging the mana of each party in order to create an environment of respect for different perspectives and behaviours
- **Whakapono:** Acknowledges the need for trust in doing the right things to ensure high quality systems and quality care
- **Tino Rangatiratanga:** Respecting the self-governance of each party and their control over their own destiny
- **Oritetanga:** All whānau experience the same excellent health and wellbeing outcomes regardless of situation and challenges
- **Pūkengatanga:** There is an expected level of expertise by those delivering care and an obligation to do the best for patients and whānau
- **Kaitiakitanga:** Acknowledges a duty of care as a custodian that has the best interests of the patient/whānau and staff at heart

This interim report on currently available evidence of HCH nationally summarises the key findings using these values as the overarching themes. A total of 21 studies that were available have been reviewed to date, and detailed notes on each of the evaluations can be found in Appendix 1, with a full reference list at the end of the document.

Methodology

Most of the studies reviewed for this interim report use qualitative methods, such as interviews and/or focus groups, supported by quantitative evidence where possible. Challenges with data collection and availability, especially in relation to ethnicity, have limited the range of data analysis that could be carried out in different contexts, with many of the suggested recommendations relating to data queries. Only two of the more extensive studies (Ipsos for HCH, 2018; Middleton, Dunn, O'Loughlin, & Cumming, 2018) looked at the impacts of Health Care Collaborative on a more national scale. Other reports and evaluations generally relate to a particular region or PHO. Most recent evidence reviewed comes from the Wellington region through Tū Ora Compass Health and CCDHB, with other studies available from Pinnacle Health Network (where HCH was initially implemented), Northland and Southlands.



Findings

Overall, positive ratings and comments of the Health Care Home model tend to outweigh negative feedback in practices across the country (Ipsos for HCH, 2018; Ernst & Young, 2017; Tenbensel, Pashkov, Gasparini, & Kerse, 2018; WellSouth Primary Health Network, 2019). The HCH model of care has been evolving since its inception (Ernst & Young, 2017).

> *"No one who has experienced the 'before' and 'after' would go back to how things were."*
> (Pinnacle Incorporated, 2019, p. 11)

A key driver reported for the HCH model is the need to change the way general practice and primary care is provided in order to ensure sustainable, affordable, and high quality services (HCH Collaborative, 2017; Ehrenberg, Terris, & Marshall, 2020). As such, a key assumption underpinning the HCH model of care is that 'freeing up GP time for complex patients will mean better care for those populations' and so the model takes a 'whole of system' approach, rather than just focusing on those with high needs (Middleton, Dunn, O'Loughlin, & Cumming, 2018).

Key Themes

Pūkengatanga: an expected level of expertise by those delivering care and an obligation to do the best

The investment of time and effort required should not be underestimated

There is a significant investment of time and effort needed to implement the multiple required changes of the HCH model (Ernst & Young, 2017) and a key critical success factor identified has been the sustained commitment of funding, people, resources and leadership from HCH Collaborative, PHOs and DHBs (Tū Ora Compass Health, 2017; Pinnacle Incorporated, 2019; Simmonds & Potter, 2020; Ehrenberg, Terris, & Marshall, 2020), as well as a strong team approach from the beginning (Ipsos for HCH, 2018). A staged approach to implementation also makes the process more manageable (Tenbensel, Pashkov, Gasparini, & Kerse, 2018) and presents an opportunity to promote innovation in primary care, by allowing practices new to HCH, to leverage resources and insights from more experienced PHOs (Middleton, Dunn, O'Loughlin, & Cumming, 2018; Simmonds & Potter, 2020).

One evaluation found that practices in the first 6 months of implementation, as well as 18 months or more after implementation, tended to have more positive feedback (Ipsos for HCH, 2018), with some studies highlighting how overwhelmed some staff were with the extent of change(Garung, Barson, Haughey and Stokes) required (Pinnacle Incorporated, 2019). The time since implementation is thus crucial; a minimum of 3-5 years may be necessary to evaluate any truly sustainable impacts of the HCH model (Canter-Burgoyne, 2020; Ernst & Young, 2018).

LEAN processes are improving practice efficiency and teamwork

LEAN processes were generally reported by staff as helping to make their clinics run more smoothly and efficiently (Tū Ora Compass Health, 2017; Tū Ora Compass Health, 2018), improving communication and staff satisfaction (Tenbensel, Pashkov, Gasparini, & Kerse, 2018; WellSouth Primary Health Network, 2019; Simmonds & Potter, 2020; Pacific Perspectives for CCDHB, 2020).

> *"It's about working smarter, not harder."* (WellSouth Primary Health Network, 2019, p. 8)

The morning 'huddle' in particular was consistently viewed very positively in HCH practices across the country (Tenbensel, Pashkov, Gasparini, & Kerse, 2018; Tū Ora Compass Health, 2018; Pinnacle Incorporated, 2019; WellSouth Primary Health Network, 2019) and contribute to enhanced teamwork and communication (WellSouth Primary Health Network, 2019; Canter-Burgoyne, 2020; Ehrenberg, Terris, & Marshall, 2020). These 'huddles' or 'karakias' also provide a space for incorporating Te Reo Māori and Tikanga Māori (Simmonds & Potter, 2020) and the opportunity to discuss the potential language and cultural needs of Pacific and other patients scheduled for that day (Pacific Perspectives for CCDHB, 2020).

Impacts on secondary care may be promising but more time is required to measure effects

While reducing use of secondary care services is not the primary aim of HCH, quantitative analysis of use of secondary care by patients enrolled with HCH practices has been carried out across the country. The reported and measured impacts on secondary care activity range between the studies and appear to be very dependent on how long it has been since HCH implementation.

For example, there were no significant differences in secondary care activity between 2010 and 2016 in the Pinnacle Health Network (Ernst & Young, 2017), but in a 2017 review there were statistically significant reductions in ED presentations and ASH admissions, at a rate estimated to save approximately $2.9 million per year in secondary care (Ernst & Young, 2018). Māori registered with HCH practices were shown to have a greater reduction in ED presentations (24%) than other patients (14%). It was thus suggested in this case that the model is pro-equity; however, there were limited measurable effects on rates of ED attendance or ASH for people living in Quintile 5 of deprivation (Ernst & Young, 2018).

Tū Ora Compass Health (2017), on the other hand, found measurable positive differences in relation to non-HCH practices from the first year of implementation in regard to acute admission rate, ED attendances and hospital admissions, but not for ASH at that stage. In the second and third years, however, they noted a 17.2% decrease in ASH for HCH-enrolled patients compared to an increase for patients enrolled in other practices. However, an independent study carried out in the same year found that the only finding of statistical significance in Wellington practices was a drop in ED attendances for patients enrolled in HCH practices (Dasgupta & Pacheco, 2018). Another observation from this data set was that the sample of HCH practices chosen had a lower proportion (7.5%) of Quintile 5 patients than the non-HCH practices (10.1%), raising questions around other factors that affect changes in rates of secondary care admissions (Dasgupta & Pacheco, 2018). This points to the challenges of collecting, analysing and interpreting data in an accurate and meaningful way in the early stages of HCH implementation, with one study suggesting that consistent impacts will take 3-5 years to be measurable (Canter-Burgoyne, 2020). On-going monitoring of HCH to measure the longer-term impacts, with appropriate and detailed data sets, is crucial.

> "HCH is keeping people out of hospital … and providing better and more timely access to general practice when it is needed … Is it improving the quality of life and health in the community? Time will tell.."
> (Ehrenberg, Terris, & Marshall, 2020, p. 32)

Poipoia: Having empathy and nurturing the provision of quality care for whānau

Not all patients are the same

Patient satisfaction is generally high, but some provision might be needed for those who find the new processes difficult or overwhelming (Raymont & Jackson, 2012; Ernst & Young, 2017; Tū Ora Compass Health, 2017; Tenbensel, Pashkov, Gasparini, & Kerse, 2018; WellSouth Primary Health Network, 2019). Self-check-in, for example, improved patient flow, but presented logistical challenges for staff and many whānau Māori and Pacific patients place high importance on face-to-face contact at the front desk as a way of building and maintaining trust (Simmonds & Potter, 2020; Pacific Perspectives for CCDHB, 2020).

GP triage has "saved [patients] time and avoided a visit to the GP – this new service is awesome". For clinicians, the model "means [they are] so much more in control of [their] day".
(Tū Ora Compass Health, 2017, pp. 15, 19)

"Urgent unplanned care or acute demand needs to be managed firstly before clinicians have released capacity to commence work on Proactive Care."
(Canter-Burgoyne, 2020, p. 3)

Patient time has, however, been saved by new tools implemented through the HCH model, such as GP and/or nurse triage (Ernst & Young, 2017; Tū Ora Compass Health, 2017) and opportunities for pre-work (Pacific Perspectives for CCDHB, 2020).

Unplanned appointments are more effectively managed

HCH approaches for reducing incoming call volumes are helping practices to manage daily demand (Pacific Perspectives for CCDHB, 2020). Practices have generally found a reduction in same-day unplanned appointments (Ernst & Young, 2017; WellSouth Primary Health Network, 2019). However, less impact was noted in the areas perceived as most challenging to change, including wait times and flexible appointments (Ipsos for HCH, 2018).

Some HCH tools for routine and proactive care may need revising

While Tū Ora Compass Health's risk stratification tool was heralded as a useful approach to managing care by The Commonwealth Fund (2018), studies tended to highlight challenges with this tool. Lack of clarity around shared care plans and risk stratification tools was reported in several cases. There were also a number of challenges in developing community-based care plans that rely on high levels of intersectoral coordination (Ipsos for HCH, 2018; Ehrenberg, Terris, & Marshall, 2020). Nevertheless, HCH is seen as encouraging information sharing, intersectoral coordination and strengthened relationships between and within providers (Pacific Perspectives for CCDHB, 2020).

Tools such as CLIC were viewed as an effective means for helping practices manage long-term conditions better, but were also seen as too detailed and onerous (WellSouth Primary Health Network, 2019). Data was not available to measure the uptake of Year of Care and Long Term Care plans in Wellington, but analysis of Advanced Care Plans (ACPs) uptake shows that both Very Low Cost Access (VLCA)

and non-VLCA HCH practices are making faster progress than non-HCH practices in this sphere (Ehrenberg, Terris, & Marshall, 2020).

Proactive care management has generally not been found to be well-implemented to date (Ehrenberg, Terris, & Marshall, 2020), due to its relatively late addition to the HCH implementation model (Ernst & Young, 2017), and the time required for it to take effect (Pacific Perspectives for CCDHB, 2020).

Manaakitanga: Acknowledging the mana of each party to create an environment of respect for different perspectives and behaviours

Not all practices/PHOs are the same

Locales that are able to draw on a past collaborative relationship between their local DHB and/or PHO are more likely to be able to implement new models of care, such as HCH, more rapidly and effectively (Middleton, Dunn, O'Loughlin, & Cumming, 2018). Having the necessary underpinning infrastructure is a key ingredient for successful change (Pinnacle Incorporated, 2019; Pacific Perspectives for CCDHB, 2020), with smaller and/or VLCA practices often reporting more challenges, due to a lack of resources and infrastructure to facilitate the (Garung, Barson, Haughey and Stokes) change (Ipsos for HCH, 2018; Ehrenberg, Terris, & Marshall, 2020). HCH readiness assessment did not consider existing infrastructure in some areas (Simmonds & Potter, 2020).

Expanded teams have enhanced teamwork and improved continuity of care

New roles such as clinical pharmacists and Health Care Assistants (HCAs), Primary Care Practice Assistants (PCPAs) and/or Medical Care Assistants (MCAs) have contributed to increasing team-based care, reduced reliance on the GP (Ernst & Young, 2017) and improved continuity of care (WellSouth Primary Health Network, 2019; Simmonds & Potter, 2020; Ehrenberg, Terris, & Marshall, 2020). However, there are still challenges with role clarity for some of the newer positions, especially HCAs/PCPAs/MCAs, in the early stages of implementation (WellSouth Primary Health Network, 2019; Pinnacle Incorporated, 2019). Overall, these expanded and enhanced practice teams have been a key benefit of the HCH model in a range of settings (Pacific Perspectives for CCDHB, 2020).

> *"Collaboration is the recipe for success as we work alongside out community service colleagues in multi-disciplinary teams."*
> (Tū Ora Compass Health, 2017, p. 5)

Staff workload may have increased in some cases

Reports on workload differ depending on the study and appear to be linked closely to the specific context. For example, in Northland, GPs and nurses reported increased job satisfaction, while administrators were overwhelmed with an increased workload (Tenbensel, Pashkov, Gasparini, & Kerse, 2018). In Wellington, on the other hand, staff tended to report improvements in workflow overall, especially receptionists (Tū Ora Compass Health, 2018). Nevertheless, staff turnover was a challenge to implementation, with practices experiencing change fatigue and resistance from

staff due to the high workload, especially in the beginning (Simmonds & Potter, 2020). Features such as telephone triage, while having clear benefits for patients and some staff, have also contributed to increased clinical workload in some cases (WellSouth Primary Health Network, 2019). This is especially so in practices which were already operating with limited capacity and infrastructure before adopting HCH (Pacific Perspectives for CCDHB, 2020).

Whakapono: Acknowledges the need for trust in doing the right things to ensure high quality systems and quality care

Continuity of care and trust-based relationships are important for Māori and Pacific patients and whānau

Prompt, effective communication through a variety of modes is especially important for whānau Māori (Simmonds & Potter, 2020) and Pasifika (Pacific Perspectives for CCDHB, 2020). Qualitative findings suggest that the HCH model may contribute to fostering an environment of trust, supported by quantitative elements as a significant drop in call abandonment rates with the reorganisation of telephone access (Simmonds & Potter, 2020). Retention of patients may have improved with the HCH model, but there is no conclusive evidence as yet (Ernst & Young, 2017).

Telephone triage supports continuity of care and managing unplanned appointments, but may not be equitable

There is a lot of evidence that some face-to-face consultations have been replaced with new forms of contact such as telephone or video consultations, allowing some practices to provide more consultations overall and improving continuity of care (Raymont & Jackson, 2012; Raymont, 2013; Ernst & Young, 2017; Tū Ora Compass Health, 2018; WellSouth Primary Health Network, 2019).

> "We wouldn't go anywhere else. It's the trust thing." (Patient)
> (Simmonds & Potter, 2020, p. 21)

One staff interview in a study in Wellington highlighted the challenges of measuring the advantages of GP triage as these are "less measurable – though no less tangible" (Tū Ora Compass Health, 2019, p. 26). Nevertheless, data shows that 62% of requests for care were managed by means other than a same-day visit in the Pinnacle Health Network region (Ernst & Young, 2018) and almost 40% of GP triaged calls in Northland were resolved during the time of call (Canter-Burgoyne, 2020). 34% of patients in Wellington practices were successfully managed over the phone by the third year of implementation (Tū Ora Compass Health, 2019).

However, most triage events for Māori in CCDHB (Wellington) resulted in a same day consultation. Māori triage events constitute 18% of total triage events in CCDHB, but most (70%) of these are completed by a nurse, which is more than for non-Māori patients. Furthermore, the proportion of triage events where contact is not made is higher for Māori (Simmonds & Potter, 2020), suggesting that the benefits of telephone triage are not experienced equitably at this stage.

Patient portal is useful for some, but not all

Great progress has been made in terms of technology and digital approaches to healthcare (Ehrenberg, Terris, & Marshall, 2020). Overall, patients report new ways to contact clinicians and adoption of the patient portal is generally much higher in HCH practices than non-HCH practices (Ernst & Young, 2017; Tū Ora Compass Health, 2017; Pinnacle Incorporated, 2019), increasing patient accessibility to healthcare (Kim, 2019). Concerns were, however, raised around confidentiality (Simmonds & Potter, 2020) and the risks of patients having access to clinical notes that they may misinterpret (Pacific Perspectives for CCDHB, 2020).

Although data is not available by ethnicity, early reports show the patient portal is popular with older people, not just younger generations (Tū Ora Compass Health, 2017; Simmonds & Potter, 2020). Nevertheless, even digitally literate people have had challenges getting used to the ManageMyHealth app (Pacific Perspectives for CCDHB, 2020).

> "Patient portal activation is a better predictor of health outcomes than known socio-demographic factors such as ethnicity and age."
> (Miller, 2020)

Tino Rangatiratanga: Respecting the self-governance of each party and their control over their own destiny

Helping people to help themselves

Patient and team stories showed an increase in a philosophy of 'helping people to help themselves' (Tū Ora Compass Health, 2019) and having a greater focus on planned, proactive care was seen as one of the biggest advantages to implementing the model (Pinnacle Incorporated, 2019). Pre-work and pre-planning activities are seen as improving routine care (WellSouth Primary Health Network, 2019) and more whānau Māori, for example, report that most or all of their needs are now being met in their primary care service (Simmonds & Potter, 2020).

Overall, HCH has also contributed to improvements in self-management of health for patients through elements such as Year of Care Plans, Shared Medical Appointments and using the patient portal. However, greater incorporation of kaupapa Māori plans is recommended (Simmonds & Potter, 2020) and Year of Care planning can be difficult to sustain without culturally appropriate approaches to engagement to overcome the challenge of 'getting people in' (Pacific Perspectives for CCDHB, 2020).

People want to become more health literate

It was noted that patients have a strong commitment to improving their health literacy, especially Māori and Pacific, but practices can facilitate this further. For example, one simple measure would be to ensure medication is prescribed not only with the dosage, but with the reason for taking the medicine included clearly on the prescription (Simmonds & Potter, 2020). Furthermore, overcoming language barriers is crucial for working with Pacific patients, and pre-work needs to be completed to facilitate this by, for example, organising a translator in advance (Pacific Perspectives for CCDHB, 2020).

"The model of care was initially fairly prescriptive, but as it has evolved, more flexibility has been introduced that enables practices to apply the key elements in the way that works best for their circumstances."
(Pinnacle Incorporated, 2019, p. 8)

Shared medical appointments are an effective tool that could be used more

Group consults/shared medical appointments (SMAs) have been limited in implementation but generally have received very positive feedback (Tū Ora Compass Health, 2018), especially for Māori populations. Similarly, MDTs are critical for providing coordinated support, which is appreciated by whānau, and approximately one third of MDTs in CCDHB are for Māori (Simmonds & Potter, 2020). These MDTs are critically important for providing proactive, coordinated and timely care for high needs Pacific people as well (Pacific Perspectives for CCDHB, 2020). However, one of the limitations of the current MDTs in Wellington, for example, is that there is limited representation and input from community teams at this stage, and there is room to further expand the use of this valuable approach (Ehrenberg, Terris, & Marshall, 2020).

Flexibility and adapting to local contexts

Striking a balance between rigidity and flexibility is a key theme highlighted in many studies of the evidence review. The way the model is introduced reflects local priorities in each area (HCH Collaborative, 2017), but greater flexibility to adapt the model to suit individual circumstances at the practice level is recommended in several studies.

"The model brought standardisation and efficiency, but now there is a need to address the variation in contexts and practices and a corresponding move towards more focussed support." (GP)
(Ehrenberg, Terris, & Marshall, 2020, p. 37)

One study notes that "Health Care Home has never been a one-size-fits-all programme" (Tū Ora Compass Health, 2019, p. 23) and that it has become more flexible over time (Pinnacle Incorporated, 2019). At the same time, however, there were challenges reported with ambiguity and too much brevity in other areas (Ipsos for HCH, 2018).

On the other hand, rigidity of some aspects of the programme design were reported as posing a challenge in implementing the service (Tenbensel, Pashkov, Gasparini, & Kerse, 2018). There may be a challenge here with the interaction of the HCH model of care and particular DHB/PHO funding models, which limit the ability of the model to adapt well to the specific contexts of some providers (Simmonds & Potter, 2020). In Wellington, for example, staff reported that their funding model meant practices 'had to fit in a box' and measures/outcomes were so specific that it made it hard to adapt the model to local needs (Ehrenberg, Terris, & Marshall, 2020). The provision of extended hours, for example, needs to be managed on a case by case scenario for each practice (Canter-Burgoyne, 2020). Staff in Wellington reported that the model was 'flexible' in that it enabled "practices to work within the framework but maintain their autonomy and ability to tailor their services to their community" (Ehrenberg, Terris, & Marshall, 2020, p. 18). However, the model was inflexible in that practices were all at different starting points in capacity (such as with technology, back office, and

management support). Nevertheless, practices received a standardised level of funding that was difficult especially for VLCA practices to maintain. For that reason, Ehrenberg, Terris and Marshall (2020) suggest a "tight-loose-tight" approach, which would include being:

- ✓ Being clear on the objectives;
- ✓ Flexible on how the model is delivered; and
- ✓ Clear on how results will be measured.

This may support the development of stronger relationships between practices and PHOs and/or DHBs fostering respect for and trust in the self-governance of individual practices and PHOs.

Oritetanga: All whānau experience the same excellent health and wellbeing outcomes regardless of situation and challenges

"Some of the key assumptions underpinning HCH domains and elements are not aligned with the realities of Pacific peoples."
(Pacific Perspectives for CCDHB, 2020)

Equitable outcomes not consistently evident

While this data was not given in studies based in other regions, around 80% of both Māori and non-Māori who are enrolled with Wellington PHOs are enrolled in HCH practices (Simmonds & Potter, 2020). However, only 75% of Pacific people are enrolled in these practices (Pacific Perspectives for CCDHB, 2020). Simmonds and Potter (2020) also found that Māori enrolment in HCH practices appears to have reduced overall Māori ASH rates in Wellington, but at the same rate as that for non-Māori. As Māori have a much higher ASH rate than non-Māori, this suggests that inequities are not being addressed at this stage.

An 'equity lens' has been strengthened in the HCH model of care review

While some earlier studies suggest the HCH model might be pro-equity (Ernst & Young, 2018), studies in Northland found no clear indication of how their adaptation of the HCH model would lead to reductions in inequities between Māori and non-Māori (Tenbensel, Pashkov, Gasparini, & Kerse, 2018). Furthermore, a recent Wellington study reports that an 'equity lens' has been missing from the model to date, although some changes have occurred progressively since 2016 to address this. For example, practices with high-needs populations are prioritised for entry to the programme, receiving a higher per-capita amount for high-needs populations, and ethnicity-specific targets have been set (Ehrenberg, Terris, & Marshall, 2020). Furthermore, the most recent review of the HCH model of care requirements is grounded in 'Pae Ora', thus incorporating a kaupapa Māori perspective into the model's design (HCH Collaborative, 2020). Applying a pro-equity lens is important for management of healthcare seeking behaviours, patterns of service utilisation, and valued dimensions of care for Māori, Pacific and other high needs populations – these need to be better understood and would benefit from deeper examination (Pacific Perspectives for CCDHB, 2020).

Cultural needs are about more than just ethnicity

Cultural needs are about more than just ethnicity and current approaches in this area should be refined (Ipsos for HCH, 2018). Provider connection to place and history need to be acknowledged in the wider community and it is important for whānau Māori to see and hear Te Reo used in correct ways at their health provider (Simmonds & Potter, 2020). 'Whole of practice' strategies are also essential to engage and meet the cultural needs of Pacific patients and families. More support is needed with how to apply equity practically on a daily basis, such as prioritising call backs (Canter-Burgoyne, 2020). Navigators are one approach to achieving this, but there are some concerns with this in terms of confidentiality, as the Navigator can be a person with a lot of community ties (Pacific Perspectives for CCDHB, 2020).

> "Improved access was viewed as contributing to reducing health inequalities. The ability to reduce inequities in access however is less clear. Very little was reported in terms of reaching out to disengaged or more vulnerable people." (Ehrenberg, Terris, & Marshall, 2020, p. 36)

Several assessment tools are available to critique and redesign programmes before implementation in Māori communities and these should be utilised in reviewing the model and its features. The use of Māori models of health and clinical assessment help ensure the range of health needs of whānau are included in their care. A model of care needs to consider health workforce, Māori health workers, and creating a culturally safe environment for whānau Māori (Simmonds & Potter, 2020). Furthermore, it was noted that in Wellington there was no engagement with the Māori Partnership Board before implementing HCH, which would have enabled a kaupapa Māori perspective to guide implementation and strategies for taking a pro-equity approach (Simmonds & Potter, 2020).

Lower cost is not everything

Despite services being offered at a lower price for enrolled patients, other studies of the experiences of Māori and Pacific reveal that lower fees on their own do not always equate with improved health outcomes (Middleton, Dunn, O'Loughlin, & Cumming, 2018). While one study in Wellington noted that whānau Māori appreciated virtual forms of care in fitting into their daily lives (Simmonds & Potter, 2020), another study noted that cost is a barrier for whānau in accessing virtual care (Canter-Burgoyne, 2020).

Face-to-face delivery also remains an important aspect of care for Pacific peoples and online solutions may not be effective for all Pacific patients (Pacific Perspectives for CCDHB, 2020). In fact, the increasing use of these online solutions risks exacerbating a digital divide and resulting barriers to access, particularly for Pacific, Māori, and other high needs populations. Currently in Northland, patient portal activations were around 50% for non-Māori and only 30% for Māori (Canter-Burgoyne, 2020). Data in Wellington also shows a higher uptake for practices with fewer high-needs patients/whānau (Ehrenberg, Terris, & Marshall, 2020).

Kaitiakitanga: Acknowledges a duty of care as a custodian that has the best interests of the patient/whānau and staff at heart

A patient-centred model?

Several studies noted that the way the model is implemented in some cases does not reflect a patient-centred approach, as it is driven by providers and funding models, rather than patient needs. This can result in a lack of accountability to communities (Simmonds & Potter, 2020; Ehrenberg, Terris, & Marshall, 2020; Canter-Burgoyne, 2020). Implementation of the HCH programme should cater for patients who are less capable (Ipsos for HCH, 2018) and strengthen approaches to equity.

> *There is a "tension between HCH efficiency measures to increase capacity and dimensions of quality care for practices delivery care to high need populations."*
> (Pacific Perspectives for CCDHB, 2020, p. 39)

Mixed findings in relation to the financial sustainability of HCH practices

Some practices reported that the financial performance has been maintained or improved (Ernst & Young, 2017; Ernst & Young, 2018). However, other studies have found that the implementation of some HCH elements, such as telephone triage or extended hours, create a conflict of interest for practices who still rely on co-payments from face-to-face consultations (Garung, Barson, Haughey and Stokes) (Middleton, Dunn, O'Loughlin, & Cumming, 2018; Ipsos for HCH, 2018). There are some doubts about whether the HCH funding covers the cost to practices (Tenbensel, Pashkov, Gasparini, & Kerse, 2018) and this is particularly challenging for VLCA providers, who may not be able to continue operating under the model without on-going funding (Simmonds & Potter, 2020; Ehrenberg, Terris, & Marshall, 2020). An example of this is the challenges that practices with a greater proportion of high needs face. In these cases, blocked off appointment slots are insufficient, and practices cannot accommodate every 'walk in'. For this reason, efficiency gains in some areas, such as use of patient portal, are elusive or 'cancelled out' by increased workload in other elements (Pacific Perspectives for CCDHB, 2020).

There is a suggestion, therefore, that practice sustainability should be about choosing lifestyle and work-life balance over revenue (Pinnacle Incorporated, 2019).

Recommendations

The section summarises the key recommendations made in the evidence reviewed to date. As the studies are from the past several years, some of these recommendations may have been acted on and/or may be less relevant.

> "Sustainability of the practice was not about generating more revenue by seeing more patients, but about making quality paramount in order to attract and retain both staff and patients."
> (Pinnacle Incorporated, 2019, p. 8)

Future planning should account for the significant change required

Future planning for wider rollout of the HCH in New Zealand should recognise the inter-linked multiple changes needed, and factor into model planning the necessary time and effort required to build a sustainable model and effectively embed changes (Ernst & Young, 2017). Change management is stressful and should be considered in planning (Ipsos for HCH, 2018), with practice readiness assessment also assessing provider infrastructure (Simmonds & Potter, 2020). Furthermore, having focused and

protected time on an on-going basis to plan, manage and embed change is key (Pinnacle Incorporated, 2019).

HCH model should be reviewed

A review of HCH documentation to cater for a wider range of users and practice needs, simplifying the language of the language of the requirements and providing examples, is recommended (Ipsos for HCH, 2018), ideally using a kaupapa Māori framework (Simmonds & Potter, 2020; Canter-Burgoyne, 2020). The 2020 review of HCH grounds the model in Pae Ora (HCH Collaborative, 2020), suggesting this recommendation has already been taken on board.

It was also recommended that any elements of the model that have not yet been successfully implemented in most early adopters (4-5 years) should be reviewed for relevance and adapted or removed (Ernst & Young, 2017). Another study suggests a shift of focus to proactive care, prevention, population health and social determinants of health (Ehrenberg, Terris, & Marshall, 2020).

Finally, several studies recommend redefining and/or clarifying risk stratification tools (Ipsos for HCH, 2018) and Year of Care/Advanced Care Plans (Ehrenberg, Terris, & Marshall, 2020), ideally developing kaupapa Māori equivalents (Simmonds & Potter, 2020).

Targets should be defined by communities

Targets should be defined by providers and communities ('bottom up') in order to allow greater alignment between the model and the specific context (Simmonds & Potter, 2020; Ehrenberg, Terris, & Marshall, 2020). Monitoring frameworks could be improved to better consider the complex experiences of high needs patients and families, drawing on local knowledge about the health, social and cultural contexts of high needs populations (Pacific Perspectives for CCDHB, 2020). For example, looking at measures of community resilience would be helpful (Ehrenberg, Terris, & Marshall, 2020). More community education for whānau/patients and peer group support should be encouraged (Canter-Burgoyne, 2020).

The development of Community Health Networks is an opportunity to allow for context in individual practices and communities. Currently, there is a notable lack of community and consumer voice at the governance table (Ehrenberg, Terris, & Marshall, 2020).

Patient/whānau voices need to be heard

Develop a quality mechanism for feedback from patients and whānau (Simmonds & Potter, 2020; Canter-Burgoyne, 2020).

Improved equity strategies

There is a need for more practical and detailed strategies, and clear processes of support for practices in taking a pro-equity approach (Tenbensel, Pashkov, Gasparini, & Kerse, 2018). Ensure inclusion of Te Reo and Tikanga Māori (Simmonds & Potter, 2020) and develop strategies and approaches to ensure genuine access to patient portals for people who have barriers to accessing information in that way (Pacific Perspectives for CCDHB, 2020). Add some focused lenses on youth and children (Ehrenberg, Terris, & Marshall, 2020), mental health (Ehrenberg, Terris, & Marshall, 2020) and marginalised patients (Ipsos for HCH, 2018).

IT use can be explored further

Wider exploration of the wider potential of IT to support access, such as offering more email consults and introducing more video consults was recommended in 2019 (Pinnacle Incorporated, 2019), but recent studies have all highlighted the preparedness of HCH practices to adapt to Covid-19 restrictions by having a good deal of the necessary infrastructure and systems in place (Simmonds & Potter, 2020; Canter-Burgoyne, 2020; Ehrenberg, Terris, & Marshall, 2020). HCH practices should continue to work towards electronic infrastructure (Ehrenberg, Terris, & Marshall, 2020).

Expand and embed new roles further to maximise benefits to patients/whānau

Embed and expand on new roles introduced through the model, such as Health Care Assistants, further incorporating other roles such as physiotherapists, social workers, and midwives (Ipsos for HCH, 2018).

On-going funding

Ensure adequate funding and appropriate configuration for individual providers (Simmonds & Potter, 2020; Canter-Burgoyne, 2020) Garung, Barson, Haughey and Stokes, enabling practices more scope to set the pace of change (Pacific Perspectives for CCDHB, 2020).

On-going education

Staff and patients will require sustained education and support to maximise use of the key enablers of the HCH model (Ernst & Young, 2017) and promote health literacy (Ipsos for HCH, 2018)

Several recommendations were made regarding data

Shared health records between primary and secondary care would enable a positive outcome for integrated care (Ipsos for HCH, 2018) and it is important to provide practices with data that allows them to be aware of issues and act accordingly (Canter-Burgoyne, 2020). It would also be useful to carry out a more detailed analysis using matched patient sample across different models that compares a range of patient and staff experiences, clinical and health outcome indicators prior to and after practices become HCHs (Middleton, Dunn, O'Loughlin, & Cumming, 2018)

More evidence and research is required, especially looking at Māori and Pacific perspectives as well (Middleton, Dunn, O'Loughlin, & Cumming, 2018) – the 2020 CCDHB studies (Simmonds & Potter, 2020; Pacific Perspectives for CCDHB, 2020) provide a foundation for future research on these perspectives. High quality data, including patient portal and call management (Canter-Burgoyne, 2020), needs to be collected by ethnicity in order to ensure pro-equity habits, such as calling back Māori patients first, can be adopted (Simmonds & Potter, 2020).

Challenges and Gaps

Several observations were made around the on-going gaps and challenges in the evidence collected and reviewed to date.

Studies are from a range of practices with different contexts and at different stages of implementation

Reports from Pinnacle Health Network, where the model was implemented first, tend to have the most positive feedback and quantitative findings, compared to other regions of New Zealand. It is important to note, therefore, that the studies in this report are from different parts of the country, where practices are at different stages in implementation of the model. This impacts the amount of meaningful data collection, analysis and comparison that can take place. Every practice also has their own journey with implementing the model and may take different lengths of time to reach each stage of implementation. Some reports have suggested that 3-5 years minimum is required to truly measure the impacts of the model of care (Ernst & Young, 2018; Canter-Burgoyne, 2020).

HCH practices must often meet certain requirements before joining the programme

Practices tend to have a strong baseline before HCH is implemented, because they must meet certain requirements, depending on the funding model of their DHB/PHO. Differences observed between HCH and non-HCH practices may thus also reflect a difference in pre-existing practice standards, and it is difficult to distinguish between this and the effects of the HCH model of care. Again, more data is required over a longer time period, including before implementation, to reliably assess this.

Are the impacts on secondary care due to causation and not just correlation?

Some of the key measures of success, including in the updated HCH model of care (HCH Collaborative, 2020), include impacts on secondary care services such as ED attendance or ASH. However, many of these areas of health, including, for example, proactive care, are also being addressed through other initiatives nationally, which may obscure any specific HCH effect (Ernst & Young, 2017). While HCH practices show lower rates of ED attendances, hospital readmissions and ASH, it is important to recognise that a multitude of factors influence these rates, including population demographics of the practices, pre-existing practice standards and so on.

Limitations to quantitative analysis due to availability of data

A key challenge highlighted across the reports is the challenge in acquiring high quality, detailed data from before and after HCH implementation. Most studies rely heavily on qualitative methods such as interviews or practice groups.

Reliability of self- versus independent reporting

Reports done by independent organisations as opposed to the reports made by practices, PHOs or DHBs themselves tend to report differently. A balance of independent and self-evaluation is important in supporting reliable monitoring and evaluation of evidence to date.

Conclusion

The evidence compiled and reviewed to date suggests that the Health Care Home model of care has positive impacts for both practice staff and patients/whānau. Aspects of the model, such as expanded teams and community engagement, could be further developed, while other components, especially in relation to Proactive Care, could be revised. Patients now have multiple ways to contact their practices, depending on their preference and needs, and having greater availability at the

primary care level may be having a positive effect on reducing access to some secondary care services. However, no practice is the same, and some practices, especially those operating as VLCA or with high proportions of high-needs patients, may find it more difficult to experiences all the benefits the model can offer for other practices. For this reason, a stronger pro-equity lens is recommended at all levels of the model, acknowledging that not all practices or patients are the same, and actively prioritising Māori, Pacific and priority populations. This has been a core focus of the 2020 model of care review (HCH Collaborative, 2020).

The following Appendix includes detailed notes summarising the studies reviewed for this report, followed by a full reference list.

Appendix 1: HCH Evidence Review – Detailed Summary

Year	Target Population	Report Focus	Key Findings

2012 *June*	Pinnacle Network (Midlands DHB)	Evaluation of the Midlands Health Network Integrated Family Health Centre (IFHC) Model of Care: Patient survey results (Raymont & Jackson, 2012)	• 80% to 85% of patients gave good scores to all aspects of the service. Doctor and nurse consultations were scored good or great in 95% and 94% of cases.
			• A high score included the PAC, and many people appreciated the alternatives to face-to-face consultations with the doctor. **Some said that the process was quicker than it had been in the past**.
			• Patients were also asked whether they had experienced specific activities; the percentage giving a positive response were:
			  o Face-to-face visit with a doctor - 92%
			  o Face-to-face visit with a nurse (without seeing a doctor) - 39%
			  o Telephone consultation with a doctor or nurse – 32%
			  o Email contact with a doctor or nurse – 15%
			  o System generated call from the health service – 32%.
			• In summary, **patient satisfaction was high, but some provision might be needed for those who find the new processes difficult**.

2013 *May*	Pinnacle Network (Midlands DHB)	Evaluation of the Midlands Health Network Model of Care Phase II Report (Raymont, 2013)	• Over the study period there is evidence that the **face-to-face consultations were replaced with new forms of contact**. • The **rate of low urgency presentations (classified as Triage 4&5) declined slightly** and the low urgency presentations with diagnoses seen as "ambulatory sensitive" (ASH) declined markedly. This suggests an increasingly more appropriate use of the ED department. • **For Māori there is a decrease in ED attendance rates in HCH practices**, compared to an increase for the control practices for ED rates.

2017 *January*	Pinnacle Network (Midlands DHB)	Ernst & Young Health Care Home Review, 2016/2017 (Ernst & Young, 2017)	• "It appears, from the perspectives of both patients and providers, that the model has achieved positive changes" (p. 4)
			• Model has evolved since inception and there have been **significance investment of time and effort to implement the multiple required changes**
			• Positive results for patient experience overall, and **staff generally rated the model higher than the traditional model of care**
			• **Increases in clinical capacity** were reported by practices, with **new roles (e.g. clinical pharmacists) increasing team-based care and reduced reliance on the GP**
			  o **Patient time has been saved** significantly through use of tools e.g. GP triage
			  o There was also an **increase noted in patient consultations of around 12%**, which was supported by the availability of virtual consultations
			• The **financial performance of PMHN practices was reported to have been maintained or improved**
			• Adoption of the **patient portal was significantly higher in HCH practices** than non-HCH practices

Year	Target Population	Report Focus	Key Findings

			• HCH practices noted a **30% reduction in same-day unplanned appointments** 'as a minimum' due to allocation of telephone slots between GP/nurse and patient
			  ○ All HCH practices identified an 18-25% call abandonment rate at peak times during the HCH modelling phase, but data for 2016 shows a **substantial decrease in call abandonment rates and was between 1-8%**, depending on the practice
			• **Retention of patients by practices may have improved** during the time of the study as there was a low turnover
			  ○ But when compared to baseline practices in 2015, the average differences in patient experience between evaluation practices and other practices were minimal
			• However, **no significant differences in secondary care activity** were found between HCH and control practices
			• **Proactive care management** for long-term conditions is one of the key components of the logic model that drives the expectation of improvement in ED, hospitalisation, and ASH rates, but this:
			  ○ **Takes time** to take effect
			  ○ Was a **relatively late addition** to the HCH implementation path for practices in this analysis
			  ○ **Is being addressed through other initiatives nationally, which may obscure any specific HCH effect**
			• Recommendations:
			  ○ Any future planning for wider rollout of the HCH in NZ should **recognise the inter-linked multiple changes needed, and factor into model planning the necessary time and effort required** to build a sustainable model and effectively embed changes
			  ▪ **Allowing time and maintaining realistic expectations while expecting measurable change requires balancing and rebalancing of organisational effort** and commitment
			  ▪ **Staff and patients will require sustained education** and support to maximise use of the key enablers for the HCH model
			  ○ **Patient experience, especially that of Māori and Pacific, should continue to be monitored and reported**
			  ○ Any **elements of the model that have not yet been successfully implemented in most early adopters (4-5 years) should be reviewed for relevance** and adapted or removed

2017 *September*	Tū Ora Compass Health (Wellington)	First Year: Achievements and Reflections (Tū Ora Compass Health, 2017)	• HCH model was implemented in Compass through a phased enrolment of practices, joining in tranches • "**Early findings are encouraging**" (p. 10), with indications of positive impacts for both patients and practices and faster rates of improvement in HCH compared with non-HCH practices (including reduced hospitalisations) ○ **8% decrease in acute admission** for HCH practices compared to 3.7% decrease for non-HCH practices

Year	Target Population	Report Focus	Key Findings
			○ For **ED attendances, 3.5% decrease** for HCH practices vs 1.7% increase for non-HCH practices ○ For **hospital readmissions, there was a 4.1% decrease** for HCH practices compared to a 1.5% increase in non-HCH practices ○ **For ASH, there was less of a decrease in HCH practices** than for non-HCH practices, but the report notes that there were **higher ASH starting rates for HCH practices** so this may still have a greater overall effect ○ **9.2% increase in patient portal activation** for HCH practices, compared to 4% for non-HCH ○ **POAC claims are increasing over time for HCH practices (33.7%)** but declining for non-HCH practices (23.2% decrease) • Key critical **success factor for the first year was the sustained commitment of funding, people resources and leadership** from Compass and CCDHB ○ "**Collaboration is the recipe for success** as we work alongside our community service colleagues in multi-disciplinary teams" (p. 5) • Patient and team stories were also positive: ○ GP triage "**saved me time** and avoided a visit to the GP – this new service is awesome" (p. 15) and for clinicians, "means I'm so **much more in control of my day**" (p. 19) ○ Staff reported increased **opportunities to broaden their range and scope of work**, which, while challenging, was also extremely rewarding ○ LEAN processes were reported to make the **clinics run more smoothly** ○ **Early reports on the patient portal show it is popular with older people, not just younger generations**
2017	HCH National Collaborative	HCH briefing for the Incoming Minister (HCH Collaborative, 2017)	• Driver for the HCH model is the need to change the way general practice and primary care is provided in order to ensure sustainable, affordable, and high quality services • **The way the model is introduced reflects local priorities in each area** – e.g. different points of focus in Northland vs. Auckland and so on • To date, **early evidence in CCDHB area showed an 8% decrease in acute hospital admissions for HCH practices** in the 12 months post-implementation, compared with a 3.7% decrease for non-HCH practices • ED attendances showed a 3.5% decrease over 12 months for HCH practices compared with a 1.7% increase for non-HCH practices • Hospital readmission rates have reduced by 4.1% in HCH practices compared with a 1.5% increase in non-HCH practices
2018 *April*	Pinnacle Network (Midlands DHB)	Health Care Home evaluation - updated analysis: April-	• Each version of the analysis showed significantly reduced ASH rates, **with up to 20% fewer ASH** • There was also a **significantly lower rate of ED presentations (14% decrease) with a large favourable difference among Māori (24% lower) and elderly HCH patients (32%)**

Year	Target Population	Report Focus	Key Findings
		September 2017 (Ernst & Young, 2018)	○ The ASH and ED **impacts were estimated at $2.9 million per year** (if scaled up to cover 75% of practices in the DHB regions then this would be equivalent to around $25 million per year) ○ Māori patients had similar proportionate reductions in ASH as European patients, despite those living in more deprived areas having a lesser reduction. The **associations for Maori, highly deprived and elderly populations suggest the model is pro-equity** and has its greatest effects on populations with the greatest needs. ○ However, there were **limited measurable effects on the rates of ED attendance or ASH for people living in the most deprived conditions (quintile 5)** • A case study of one privately own practice found no negative financial return and **doctors noted that their time had been freed** up more • Additional process metrics show that **62% of requests for care were managed by means other than a same-day visit, 12 times more people were accessing patient portals**, there were **fewer referrals to specialist care** and a significant **increase in telephone access** with PAC
2018 *June*	HCH practices nationally	Taking Stock: Primary Care Innovation (Middleton, Dunn, O'Loughlin, & Cumming, 2018)	• Key assumption underpinning the HCH model of care in NZ is that "freeing up GP time for complex patients will mean better care for those populations" • "Rather than implementing a specific digital innovation or designing a bespoke model of care for those with high needs, the **distinguishing feature of the HCH model of care is its 'whole of system' design**" (p. 9) ○ But **later studies show how this standard approach has limitations in practices with more high needs patients especially** • "The innovation in this model lies in the bundling together of several evidence-based components sequences in a complementary and coordinated way, with a package of support and access to tools and learning provided by PHOs and shared between members of the HCH Collaborative" (p. 42) • Subsidies to support access to first-contact primary health care services as a proportion of DHB and total funding fell between 2008/9 and 2015/6 ○ In that same period, there was an increase in practice fees at regular practices but a decrease in VLCAs • **Introduction of some HCH elements, e.g. telephone triage, create a tension for practices who still rely on co-payments from face-to-face consultations** • "forcing particular configurations of primary care organisations from the top, to fit pre-existing geographical boundaries or some other template, has been linked to an increased likelihood of clinician disengagement and lack of innovation" (p. 26) ○ The **advantage of PHOs in NZ is that they are seen as belonging to clinicians and the choice to join a particular PHO is voluntary** • "despite delivering lower fees for enrolled patients, **evaluations of the experience of Māori and Pacific PHOs have found lower fees on their own did not always equate with improved health**

Year	Target Population	Report Focus	Key Findings

			outcomes" (p. 32) – a **collaborative approach between medical and social and cultural support services is key**
			• Networks such as **HCH can promote innovation in primary care**, especially now that so many practices have adopted the model, as **practices at the beginning could leverage resources and insights from more experienced PHOs**
			  o Stability in the organisation of the NZ health care system and capability of PHOs to facilitate change also support this
			  o The emerging collaborative network between the PHOs and partner DHBs setting standards and sharing learnings around the implementation of the HCH innovation is critical to ongoing development of the model for success
			  o But these advantages are also a disadvantages in some cases, as **locales able to draw on a past collaborative relationship between DHBs and PHOs are more likely to be able to implement new models of care** more rapidly and effectively, than those areas with more complex PHO/DHB relationships
			• What is needed to **strengthen the evidence base is matched patient sample across different models that compares a range of patient and staff experiences, clinical and health outcome indicators prior to and after practices become HCHs**
			  o While reviews to date show positive outcomes, more evidence and research is required, particularly in looking at the Māori and Pacific perspectives as well (the CCDHB 2020 reports from these perspectives answer this call)

2018 *August*	Northland DHB	First Year: Process Evaluation of Northland Neighbourhood Healthcare Homes (Tenbensel, Pashkov, Gasparini, & Kerse, 2018)	• 25 semi-structured interviews with practice staff and 4 key stakeholders
			• Noted **differences between district stakeholders and general practice staff in relation to equity aims** – stakeholders felt that reducing inequities for Māori was a key priority, whereas practice staff prioritised efficiency and quality as drivers of NHH
			• Overall, the effects noted on **Tranche 1 practices were positive with implementation occurring as intended**, although not complete as only within its first year
			  o **Staged approach to implementation made the process more manageable**
			  o **Prior implementation of other innovations increased success of adapting to new model**
			• **Overall job satisfaction improved, communication was improved** in the practice overall (especially with daily huddles) and job satisfaction has improved with lower stress levels
			• Greater engagement with administration staff during the implementation was required as they are crucial to successful implementation
			  o "Implementing practices (and sponsors) **need to be attuned to the experiences and needs of administrative staff**. They are crucial to successful implementation, but there is potential for them to experience additional workload pressures." (p. 3)
			  o **Administrators experienced an increased workload, while GPs and nurses reported increased job satisfaction** with being more in control of their schedules and nurses able to perform at top of scope

Year	Target Population	Report Focus	Key Findings

			• **Patients were not interviewed, but staff reported seeing positive outcomes for patients overall**
			  o But, as with other studies, there were also **limitations in how well some changes to access were received by patients who were not able to adapt so easily to services** requiring e.g. phone or internet access and some **patients were apprehensive to discuss medical issues with non-medical staff**
			  o **NHH requires patients to learn new ways of interacting with their practices**
			• No clear indication of how NHH would lead to reductions in inequities between Māori and non-Māori – need to develop more practical and detailed strategies and clear processes of support for practices
			• **Rigidity of NHH programme design** (clinicians being unable to have input) and doubts on **whether funding of NHH covers the cost to practices** were two key issues raised
			  o **GP phone triage may increase clinician workload**

2018 *August*	HCH National Collaborative	HCH National Collaborative: Model of Care Review (Ipsos for HCH, 2018)	• The review was based on two quantitative surveys and qualitative methods including interviews and peer group discussions
			• Overall, **positive ratings and comments from these surveys and interviews outweigh negative** feedback
			  o There were however some **teething issues** with implementing the need model and not all practices had the same experiences
			  o Smaller **practices had more challenges**, often lacking the resources and infrastructure to facilitate the changes smoothly
			  o Some **lack of clarity around shared care plans** was reported as well; including, for example, the need for an interdisciplinary approach and true 'sharing', and an emphasis that cultural needs are about more than just ethnicity
			  o The interdisciplinary approach was seen by 81% of staff respondents as having a positive influence on patients
			  o **Feedback was generally more positive for practices in the first 6 months of implementation and after 18 months, than those between 6-18 months**
			• Most consistent theme of feedback was that HCH content was too 'theoretical' in places, leading to issues with ambiguity and an imbalance between clear descriptions and too much brevity and vice versa
			  o HCH Booklet was both too long and too unclear – solution needs to be not longer, but more precise (avoid intangible, catch-all terms such as 'wellbeing')
			  o A **review of the HCH documentation to cater for a wider range of user and practice needs is recommended** – presenting the requirements within a context of 'adaptation' could be useful (although 69% of respondents did think the MOC requirements were 'easy to understand')

Year	Target Population	Report Focus	Key Findings
			○ Main recommendation is striking **a better balance between the best-practice processes and resources, and one that allows some leeway to account for the inevitable variables** that exist between practices, staff, and patients • **Not all patients are the same** ○ Some of the components implemented are 'overwhelming' for some patients, while they are 'empowering' for others – e.g. patient portals, same-day triage (but 68% of staff respondents felt that same-day access and GP triage was a very positive addition, with 73% of staff rating the extended hours as having a positive impact as well) ▪ As reported in some other studies, however, there was a perceived conflict of interest between the financial interests of practices and services such as GP triage ▪ The **patient portal was rated as positive by 94% of staff survey respondents** ○ The HCH programme also must **cater for patients who are less capable**, as well as consider the **challenges of community-based care plans and the intersectoral coordination** involved • Impact in each of the HCH domains: ○ Urgent and Unplanned care – **reduced impact in areas hardest to change (wait times and flexible appointments) as these are dependent on staff availability and workload, which is much harder to change** ▪ **Extended hours have a negative effect on the bottom line** as not correct funding with the VCLA formula as does not increase co-payments, but for other practices extended hours were already the norm before HCH was implemented ○ Routine and Preventative care – reflecting similar resources, had a slightly reduced impact ▪ "**Affordability is subjective** – free primary health care for people who have a Community Service Card" (p. 51) and being **patient centric is considered likely to affect the bottom line** ▪ **Care plans were rated the most difficult** service element to deliver, followed by shared health records ○ Business Efficiency – impact slightly reduced by **challenges with Change Management** ▪ Some staff **struggling to see the efficiency gains with some aspects e.g. prework and health plans** ○ The **Cultural Needs approach needs some refinement** to be clearer as the cultural needs of patients at each practice will vary and should be adapted accordingly • **Shared health records** between primary and secondary care would enable a positive outcome for integrated care – there really are obstacles with IT systems in many situations • Other recommendations include: ○ **Simplifying language of the requirements** and **providing examples** for consistency and providing a simple introduction to **explain the reasoning behind HCH** ○ Greater **consideration of health literacy** for patients around changes in access to care

Year	Target Population	Report Focus	Key Findings
			○ **Define/clarify risk stratification tools** and expand meaning of 'interdisciplinary' approach ○ A **team approach** at the very beginning is essential to success and this is not represented within the MOC Requirements ○ **Change management** is stressful and should be considered in planning ○ Further **workforce development** for establishing and embedding new roles, e.g. Health Care Assistants ○ **Incorporating the role of physiotherapists, social workers, and midwives** into the model ○ Adding some **focused lenses on the youth and children population, mental health, and marginalised patients**
2018 *September*	Tū Ora Compass Health (Wellington)	Second Year: Achievements and Reflections (Tū Ora Compass Health, 2018)	• **Continuous progress** in telephone assessment & treatment, care planning, MDT meetings, patient portal usage, and continuous improvement through LEAN • Health Care Home implementation **reaching close to 80% of population for all ethnicities and age groups by 2018** • Staff reported **improvements in workflow**, especially receptionists who felt they were no longer the 'wall' between patients and doctors, as they could refer the patient to the GP on the phone directly • **35% of patients were being successfully managed over the phone** by this point, therefore avoiding the need to come in for a face to face appointment • Staff were **concerned that making patient notes accessible to patients would result in an influx of calls around explaining medical jargon etc., but this did not happen** • The **group consult idea** for patients with long-term conditions was popular and patients were able to share their experiences in a way that helped clinicians answer more of their questions • New teams being introduced to HCHs through the Community Services Integration approach and **Primary Care Practice Assistants have been useful in responding to routine and preventative care needs** • **Morning Huddles have positive feedback** • In the second year, there was: ○ **4.8% rate decrease in acute admission** for HCH practices (0.8% increase for non-HCH) ○ **3.4% decrease in ED attendances** (vs 2.5% increase for non-HCH) ○ **12.9% decrease in hospital readmissions** (vs 1.9% decrease for non-HCH) ○ **17.2% decrease in ASH** (vs 4% decrease in ASH for non-HCH practices) ○ **11% of same day appointment requests were changed to be future face to face** appointments through clinical triage
2018 *October*	Tū Ora Compass Health (Wellington)	Health Care Homes: Early Evidence in Wellington	• Statistical analysis of the short-term impacts of implementation of HCH in Tū Ora Compass Health practices, by analysing data from 2014 – 2017 with a sample population of 342,136 individuals registered in 58 Compass practices ○ The **statistically insignificant changes may be a result of adjustment time costs in terms of implementing HCH**, as well as that **some changes may require more time to be visible** in

Year	Target Population	Report Focus	Key Findings
		(Dasgupta & Pacheco, 2018)	the data. On-**going monitoring of HCH to measure longer-term impacts will be crucial**, as the short-term impacts are promising. • At this stage, evidence was mainly descriptive in nature, with an analysis of trends in different health outcomes (Ernst & Young analysis for 2010 – 2017 period) • The **only finding of statistical significance was a drop in ED attendance post-implementation of HCH** across Compass' practices that was shown consistently across the different models of data analysis carried out • The **only practice level data available at the time was doctor and nurse consultation rates (number of consultations / registered population) and there were no significant differences** between HCH and non-HCH practices during this time frame o For further analysis, it will be **important to consider other practice level variables that are included in the updated HCH recommended indicators** e.g. wait times, patients enrolled per GP/nurse, staff turnover, patient experience surveys, as well as HCH specific variables e.g. use of patient portal, number of virtual consults, number of calls, call abandonment rates etc. • Note: there is ***a lower proportion of Quintile 5 patients registered at the HCH practices (7.52%) compared to non-HCH practices (10.10%) – are there other factors in reduced ED attendance e.g. socioeconomic deprivation that have been missed?***
2018 *November*	HCH practices nationally	International Innovations Highlights – featuring Health Care Home Programme (The Commonwealth Fund, 2018)	• **Commonwealth Fund Project on Promising Delivery Models for Patients with Complex Health and Social Care Needs** – this looks at models tried in the U.S., such as the inspiration for HCH (Group Health Cooperative) and other models internationally, including a brief review of Health Care Home in the NZ context • The report **mentions the Compass risk stratification tool to identify the top 7% of adults at risk of hospital admission** and assign a designated Care Plan Coordinator to each person • In July 2016, an evaluation of the programme was carried out by an independent Crown entity, which found that the **HCH model resulted in a statistically significant reduction in ED attendance**
2019	CCDHB (Wellington)	Evaluating the staff experience: Learnings from Health Care Homes in the CCDHB Region (Kim, 2019)	• This was a student research study which evaluated staff experience in HCH in the CCDHB region. The study found that: o The HCH model **improved overall efficiency** o **Healthcare can be provided in several different ways** with HCH e.g. through GP triage, Patient portal and so on o There are **better relationships** with external health services and enhanced workplace relationships o There is **increased accessibility** to healthcare, such as through the patient portal o Staff are taking on **wider roles** to work on top of their scope and teams are expanded include new roles that facilitate teamwork

Year	Target Population	Report Focus	Key Findings
			○ **More efficient systems and standard processes** are in place to reduce wasted time and resources, resulting in better management under pressure
2019 *September*	Tū Ora Compass Health (Wellington)	Third Year: Achievements and Reflections (Tū Ora Compass Health, 2019)	• **Over 1.3 million patients enrolled in HCH practices around the country** at this point, with a relatively proportionate representation of ethnicities and age groups of enrolled practices in the Wellington and Wairarapa regions • Patient and team stories showed an increase in a philosophy of **helping people to help themselves** • A variety of ideas have been developed by different teams to improve patient engagement and feedback specific to their populations, recognising that "**Health Care Home has never been a one-size-fits-all programme**" (p. 23) • **Implementation and required changes were overwhelming at first for some practices and staff**, so having a choice of which tranche to join was particularly useful and enabled practices who were less prepared for the change to learn from earlier adopters of the programme • The **reported advantages of GP triage are "less measurable – though no less tangible"** (p. 26) • Practices with **high needs populations also responded positively to the changes**, especially e.g. MDT approaches, utilising outreach teams and involving community partners • Other findings from the third year include: ○ 34.2% of all calls resolved in triage ○ 10.3% same day appointments changed to future face to face ○ Decreased rate of ED attendances for all ethnicities enrolled with HCH practices (13.1% decrease for Māori (vs 8.1% increase for non-HCH practices), 4.6% decrease for Pacific and 7% decrease for other ethnicities) ○ Māori also showed significant decreases in acute admissions (14.8% decrease compared to 9.4% increase for non-HCH practices), with Pacific and other ethnicities having a smaller decrease ○ Decreases in ASH were more significant for Māori enrolled in HCH practices than for other ethnicities
2019 *November*	Pinnacle Network (Midlands DHB)	Implementing the Health Care Home model: Experiences from three privately owned general practices in the Pinnacle Network (Pinnacle	• Qualitative study with semi-structured interviews looking at three practices, with the aim of providing additional learning to the findings of the earlier Ernst & Young evaluations • HCH model succeeds in **supporting future sustainability of practices and their workforces** ○ "Sustainability of the practice was **not about generating more revenue by seeing more patients, but about making quality paramount in order to attract and retain both staff and patients**" (p. 8) ○ Practices reported **choosing lifestyle and work-life balance over revenue**, and the positive impacts this has had on sustainability of their workforce • Working lives of practice staff are significantly improved ○ "**No one who has experienced the 'before' and 'after' would go back to how things were**" (p. 11)

Year	Target Population	Report Focus	Key Findings
		Incorporated, 2019)	○ There is a potential for extended workforces and workforce development that could be explored further • **Staff strongly believe the model enables them to offer improved quality of care** ○ Freeing up clinical capacity has enabled a focus on quality rather than relentless demand ○ Having **a greater focus on planned, proactive care** is one of the biggest advantages to being a Health Care Home ○ **More control over what happens with complex patients** and the chance to unpick what the issues might be for an individual, link people in etc. ○ Patients report positively on the **new ways to contact clinicians**, e.g. through triage phone calls or online access – up to 40% of patients in one practice are using the patient portal ○ But all three practices agreed that **successful telephone triage requires trial and error**, patient education and time for adjustment, with flexibility to adapt it to suit the needs of the practice and its patients ○ A larger number of in-depth patient experience interviews are recommended in future research • **Strong and focused leadership is important to successful implementation and staff buy-in** ○ Daily team meeting **(huddle) has had a positive impact** in addressing issues, information-sharing and fostering teamwork ○ **Better understanding of the importance of this leadership could offer more insight** into the 'people' elements associated with a major change process • Practices **need to have the capacity and capability for change management and business development** ○ Having focus**ed and protected time on an on-going basis to plan, manage and embed change** is key ○ No matter how great the benefits are of the model and the motivation for change, the level of change required has been difficult ○ Older staff sometimes struggled to adapt to new ways of doing things ○ Some staff reported that things felt worse in the beginning when overwhelmed by initial changes, but that was to be expected and things smoothed out with time – in some places change was able to take effect more quickly than in others • **Having the necessary underpinning infrastructure is a key ingredient for successful change** ○ Implementation of the HCH model has been closely intertwined with implementation of the indici™ system ○ The **wider potential of IT to support access, such as offering more email consults and introducing video consults, is yet to be exploited** ○ Having the space to go "off-stage" gives staff the opportunity to bounce ideas off people and fosters real teamwork

Year	Target Population	Report Focus	Key Findings
			○ **Some challenges with role clarity e.g. MCA/HCA**, as nurses felt like they were losing some control, but in the end the benefits for freeing up valuable nurse time have become clear in these practices • **Flexibility allows practices to incorporate elements in a way that suits individual circumstances** ○ "the model of care was initially fairly prescriptive, but **as it has evolved, more flexibility has been introduced** that enables practices to apply the key elements in the way that works best for their circumstances" GP from Taupō (p. 8)
2019 *Late*	Southern district of New Zealand (WellSouth)	Year 1 of Implementation: Experiences and reflections from early adopter practices (WellSouth Primary Health Network, 2019)	• **HCH was in 15 practices of the Southern district by July 2019** and the findings here are the results of a study based on eight semi-structured interviews with staff from 5 of these practices in different roles • Overall, the implementation experience of HCH by practices was positive. **Different elements were introduced in practices as part of HCH** intervention: designated acute slots, GP triage, care planning and need assessment, provision of HCA, morning huddle, patient's portal, upskilling of staff, the delegation of responsibility across team members, and lean processes. As a result of implementing the HCH model, **practices increased efficiency, improved working life of staff and increased patient experience**. • Practices noted a need for change to **work more smartly** and in a structured way to ensure future viability and sustainability, and **HCH offered a model to move towards that** • Designed acute slots and phone triage helped practices to **better manage demand by reducing walk-ins** and addressing the high workload – offering a planned way to deal with acute/same-day needs ○ Some resistance among GPs to use triage over the phone was reported, however • Comprehensive Health Assessments as part of Client-Led Integrated Care were viewed as a good way to help practices manage long-term conditions better and giving nurses and doctors the opportunity to spend time with people who needed it the most ○ **CLIC might be too detailed and onerous though** – changes need to be made so it is more efficient • **Pre-work and pre-planning activities, as well as patient portals, are improving routine care** – now staff know, for example, what the patient is coming in for • **Portal and GP triage is making a big difference in efficiency and workflow**, and helping improve continuity of care - meaning **patients did not have the tell their story repeatedly to different clinicians** or nurses ○ Patients have increased access to clinician of their choice, more nurses in clinics, cheaper appointments, and less waiting time • HCH helping to **improve practice and patient efficiency with e.g. HCAs, morning huddle, GP triage, patient portal, upskilling of staff, delegation, lean processes** – improving practice efficiency and reducing stress improves patient experience ○ **"it's about working smarter, not harder"** (p. 8)

Year	Target Population	Report Focus	Key Findings
			○ Triage allowed staff to be more in control of their schedules and workload issues were address by e.g. HCAs, designated acute slots, lean process, and phone triage ○ But **role clarity for HCAs and nurses is suggested**, as well as training and education to both staff and patients regarding introduction of the new way of working, and simplification of some tools + need for flexibility to implement HCH in ways that suit individual circumstances ○ **Improved teamwork and collaboration in practices** was reported as well • Some **practices indicated commitment to continue HCH status even after funding** was stopped • **Flexibility in allowing practices to implement their components** in a way that suits individual circumstances is also recommended
2020 *June*	CCDHB Māori population (Wellington)	Kaupapa Māori evaluation of the CCDHB Health Care Home Programme (Simmonds & Potter, 2020)	• Study followed a methodology of evaluating the programme against 6 kaupapa-based evaluations criteria, drawing on **qualitative (interviews, focus groups) and quantitative (PHO/practice data) analysis of three practices in CCDHB** with a range of Māori representation (from 12% Māori to 55% Māori) • Between October 2017 to April 2020, Māori enrolments in HCH providers grew from 48% to 80% of the CCDHB population • Manaakitanga: ○ Morning **'huddle' or karakia contributes to cohesiveness, opportunistic care, and staff involvement** – these briefings provide a space for Te Reo and Tikanga Māori ○ **MDT meetings are important** for providing coordinated support for whānau and approx. one third of MDTs in CCDHB are for Māori ○ **Virtual consultations** have worked well for Māori and there is a desire for more ○ Phone triage has been beneficial for prioritising acute appointments, although it took "a bit of getting used to" and many whānau still prefer face to face appointments ▪ **Number of phone triage events for Māori has increased over time and they now make up 18% in CCDHB**, but **most (70%) triage events for Māori are completed by a nurse, which is more than for non-Māori patients** ▪ Most triage events for Māori resulted in a same day consultation ○ **Implementation of Lean processes has been challenging but effective in improving business efficiency in the longer term** ○ **PCPAs/HCAs and extended clinic hours contribute to efficiencies** ○ Use of **self-check-in improved patient flow, but presented logistical challenges** for staff and many whānau, especially those who are older or more unwell, prefer the face-to-face interaction at the staff desk ○ **Coordination of services is appreciated** by whānau and **virtual specialist consultations welcomed** ○ Whānau feel they can more easily get appointments of adequate length, and urgent care is attended to

Year	Target Population	Report Focus	Key Findings
			○ **Where data was available, dropped call rates targets were met**, but data not available by ethnicity ○ Māori **enrolment in HCH providers appears to have reduced overall Māori ASH rates, but there is no reduction in inequities between Māori and non-Māori**, as ASH rates reduced by the same amount for non-Māori at these practices, despite non-Māori experiencing ASH at half the rate of Māori ▪ *"High ASH admission rates can indicate difficulty in accessing timely care, poor coordination or care continuity, barriers to primary care, or other structural constraints such as provider capacity and the availability of primary care workers"* (p. 17) ○ **Time to third next available appointment measures improved at one provider** of the three (others showed fluctuation in results) ○ **Prompt, effective communication through a variety of modes** is important for whānau ○ Whānau prefer to see their usual doctor but recognise this is not always possible and are **thankful that other GPs can access their information digitally**, so they do not have to repeat their medical history ○ For some whānau, all health needs were now being met at their primary care service, and for others, most of their health needs were being met – **more comprehensive care removed access barriers and provided continuous individualised care** ○ Support for providers was appreciated and gradual, deliberate implementation worked well ○ **Providers gained useful data on patient engagement and want to do more to support whānau to give feedback** • <u>Whanaungatanga</u>: ○ **Whānau value relationships based on authentic personal connection and trust**, and spoke of the friendly, personal connection with staff ("We wouldn't go anywhere else. It's the trust thing", p. 21) ○ The importance of having other whānau members present in consultations, if wanted, was emphasised by those interviewed ○ Practices underwent a 'ready for change' analysis and had **opportunities to share learnings with other providers** ○ **Relationships within providers strengthened** along with relationships between providers, communities and whānau • <u>Rangatiratanga</u>: ○ **Visual management boards** important ○ **Improved overall self-management of health for patients undertaking YoC, SMAs and using the patient portal**

Year	Target Population	Report Focus	Key Findings
			▪ YoC plans required dedicated time to co-develop, but help promote self-management and more patient involvement in their own care – they appreciate the opportunity to include what they themselves think is important for their health ▪ Advanced Care Plans promote a sense of security although a **Kaupapa-based plan is also needed** (some saw the plans as unnecessarily repetitious and too long) ▪ Use of patient portal varied across whānau and practices, highlighting the importance of having different options for communicating depending on preference and digital literacy – i.e. use app or ring up, email etc. • Many older patients also use patient portal, not just the young generation as is often assumed • **Patient portal data not available by ethnicity** ▪ *Shared Medical Appointments* (SMAs) require a lot of organisation but are appreciated by whānau and generate improve health outcomes – these **work particularly well for Māori**, who appreciate having other Māori present and **changes the power dynamic** in an SMA, giving patients the ability to "run it themselves" and feel more confident talking about their condition o **Strong practice leadership required to champion implementation** and important that providers choose whether to implement the HCH programme o **HCH programme gives providers both structure and flexibility** to tailor it to their practice – "it's matured as we've matured" (p. 28) • <u>Pae ora</u>: o Whānau wellbeing is optimised by **being able to connect with services through te ao Māori**, and when **patient preference is respected** o Whānau **want to improve their health literacy** and management of their own health – e.g. clear labelling on medications with the **reason for the medication**, dosage, and frequency o **Important to see and hear Te Reo at their health provider**, but misuses of the language and cultural elements continue to cause offence and distress o **Provider connection to place and history needs to be acknowledged** in the wider community – a desire for the hauora to be in iwi hands o Implementation of HCH **has allowed greater practice efficiencies** and forward planning, and has **supported staff wellbeing** o Several aspects of the HCH model have **helped in the response to the Covid-19** pandemic • <u>Ōritetanga</u> (equity): o **Approximately 80% of both Māori and non-Māori enrolled in HCH providers** o Māori triage events increasing in both number and as a proportion of events, but **tend to have a lower proportion of triage events completed by a GP** o Triage outcomes similar for Māori and non-Māori o **Proportion of triage events where contact is not made is higher for Māori**

Year	Target Population	Report Focus	Key Findings
			○ Non-Māori experience ASH at approx. half the rate of Māori, whether enrolled in an HCH provider or not – **this disparity in ASH rates persists over time** • Pūkengatanga: ○ Recent reviews highlight **systemic failures** and reiterate the necessity of adhering to te Tiriti ○ Tangata whenua have the right to sovereignty over their data – this data is taonga ○ National frameworks and **strategies promote aspirational wellbeing** through a holistic model of health and strong relationships ○ **Several assessment tools are available to critique and redesign programmes before implementation in Māori communities** (e.g. Health Equity Assessment Tool, Whānau Ora tool, Equity of Healthcare for Māori Framework, He Pikinga Waiora, CHI Model, He Taura Tieke etc.) ○ The **use of Māori models of health and clinical assessment** help ensure the range of health needs of whānau are included in their care and whānau journeys in health must be considered in the board context of colonial impacts on health ○ **Comprehensive programmes**, that centralise equity and autonomy and are facilitated by skilled workers supported by technology, are effective ○ A **model of care needs to consider health workforce, Māori health workers, and creating a culturally safe environment for whānau Māori** ○ **Relationships are key** – acknowledgement of diverse contexts, resources realities and a commitment to healing are required – international examples promote self-efficacy, shared responsibility, customer ownership and deep commitment to wellness • Other barriers and challenges – what did not work well: ○ Manaakitanga – **model not patient-centred** (driven by providers, not patient needs), **lack of accountability** to communities and **confidentiality is compromised** with open notes ○ Whanaungatanga – supporting the whanaungatanga is the core of practice for Māori and the challenge for HCH into the future is to ensure that this strength is supported ○ Rangatiratanga – **HCH model lacks flexibility, does not adapt well to the specific context** of providers, and does not align well with Kaupapa Māori ▪ Some targets were unrealistic and **funding formula does not work for VLCA practices and was inadequate to cover the changes providers were required to make**, not considering the different complexities for different providers ▪ **Practice readiness assessment did not assess provider infrastructure** ▪ **Limited engagement with the Māori Partnership Board** before implementing HCH ▪ **Provider autonomy and data sovereignty compromised** during implementation ▪ **Systemic barriers encountered from Māori providers** when referring whānau to external specialist services

Year	Target Population	Report Focus	Key Findings
			○ Pae ora – **staff turnover was a challenge to implementation** and practices experienced **change fatigue and resistance** from staff; implementation and reporting was **more work than anticipated** and patient portal produced clashes with existing booking systems • Opportunities for improvement to CCDHB HCH programme: ○ **Review of the entire model using a Kaupapa Māori framework** ○ Provision of **high quality ethnicity data** on all features of HCH and data on the full range of health workers in providers ○ **Targets defined by providers and communities** ('bottom up', instead of 'top down') ○ Reconsider setting up some HCH elements in ways most suitable to individual practices – **better alignment between the model and specific context** of individual providers ▪ Many determinants of optimal health sit outside the biomedical model ○ Development of **kaupapa Māori equivalents of YoC and Advanced Care plans** ○ Extend and **continue SMAs** ○ Ensure **inclusion of Te Reo and Tikanga** ○ Quality mechanism for **feedback from whānau** and strengthen and promote **different ways for whānau to communicate** with providers ○ Ensure **adequate funding and appropriate configuration** for individual providers
2020 *July*	Pasifika people in CCDHB region (Wellington)	An evaluation of the HCH programme from a Pacific World View (Pacific Perspectives for CCDHB, 2020)	• 35 practices enrolled in CCDHB region are 59.3% of the practices, but represent 80.1% of enrolled patients (on November 1, 2019) • **74.6% of Pacific people enrolled with the three Wellington PHOs are enrolled in HCH practices**; around 46% of Pacific peoples in CCDHB live in NZ deprivation decile 9 and 10 areas; 86% of Pacific people in Waitangirua/Titahi Bay regions live in areas of highest deprivation • Pacific enrolment rates have been consistently high in CCDHB (97% in 2019) • Overall, **the patient-centred and equity-focused goals of HCH have fostered buy-in and commitment from staff**, as well as HCH 'infrastructural' features e.g. change management support, despite demanding and on-going change processes ○ HCH aims to change the way primary care is delivered to improve quality of care, efficiency and to achieve equitable outcomes for Māori, Pacific peoples and those experiencing high deprivation ○ **Pre-HCH delivery of 'HCH-like' approaches can provide a solid foundation for implementation, but significant adjustments are often required** for HCH implementation • Case study analysis of two practices (some quantitative and document analysis but mainly informed by qualitative case study with interviews) found that: ○ Urgent and unplanned care: ▪ HCH **approaches for reducing incoming call volumes are helping practices to manage daily demand** • Introduction of multiple channels of contacting practices useful, alongside reconfiguration of administrative, reception and phone functions

Year	Target Population	Report Focus	Key Findings
			▪ GP and nurse **telephone triage are offering a range of benefits** for many patients • Increased access to GPs and reduced waiting times for 'face to face' consultations • **Patient time also optimised through opportunities for pre-work** e.g. blood tests and x-rays ▪ **Telephone triage is being used to identify unmet need** and offer a broad range of care options ▪ Despite these benefits, **triage is time intensive and has added to clinical workloads** • Some patients expressed frustration about time taken for a triage GP or nurse to call back because practices are so busy – especially true for practices with greater numbers of high need populations • Same day requests at practices with majority high needs populations typically involve less engaged patients with complex issues, long wait times and have a significant effect on nurse capacity – **blocked off appointment slots are insufficient for high needs populations to accommodate every 'walk in'** ▪ While HCH approaches have helped practices improve access to urgent and unplanned care, **some efficiency gains are elusive - particularly for high need populations** o <u>Proactive care</u>: ▪ Delivering **proactive care for those with complex needs is a major challenge for practices.** The need for significant improvements to proactive care for Pacific patients and families is recognised ▪ **Year of Care planning is progressing, but can be time intensive for practices** and difficult to sustain • Though appointments require considerable staff resource, value of this process in recognised in giving patients the opportunity to feel like staff are walking alongside them • **Challenges lie in "getting people in"**, especially in high needs populations and with Māori and Pacific patients – **new approaches to engagement are needed** ▪ **HCH is encouraging information sharing, intersectoral coordination and strengthened relationships** between providers ▪ Practices are exploring shared care initiatives and group education sessions for delivering proactive care for those with chronic conditions o <u>Routine and preventative care</u>: ▪ **ManageMyHealth is delivering mixed results in terms of expected benefits for Pacific patients and gains for practices**

Year	Target Population	Report Focus	Key Findings
			• Younger people typically more receptive to the app, and many patients find it confusing and difficult to get used to ▪ **Practices have a strong commitment to affordability systems** that remove cost as a barrier to care • "The good thing about it is they won't turn you away" (Patient Interview, p. 28) • Some practices try to waive co-payments for families who are unable to pay for the care they require ▪ **Appropriate communication and addressing health literacy and language barriers is critical for meeting the cultural needs of Pacific patients** and families across HCH domains • **Telephone triage and daily huddles provide opportunities to identify language needs for Pacific** patients and address them through pre-work, e.g. by organising a translator or interpreter for support ▪ It is unclear how HCH efficiency and capacity building aims impact practice ability to enable continuity of care for Pacific patients and families • **Divergent experiences with continuity of care in this study**, but the benefits of seeing a regular GP or nurse were clearly expressed ▪ **Managing consultation lengths is challenging for practices with high need population** • Especially in high needs populations, were appointment length of 15 minutes often is not sufficient and only works if patients when coupled with support from a nurse of HIP and translation/interpretation support o <u>Business efficiency</u>: ▪ **LEAN approaches have improved back-office efficiencies** and are helping practices to work more effectively ▪ **Morning huddles have contributed to team cohesion** and coordination and have been an important factor in sustaining ongoing commitment to HCH changes ▪ Some business efficiency outputs, such as changes to front of house areas, have caused confusion and required extra support for patients • E.g. **self-check-in kiosk caused confusion** and time spent teaching people to use the kiosk, plus for Pacific patients was a **barrier to access** as feeling comfortable and **trusting in the practice can be about being 'known'** and acknowledged by front of house staff • *This points to* ***wider issues with health and digital literacy in practices with high needs populations and the need for the HCH model to be flexible and adapted to local contexts*** ▪ **Expanded and enhanced practice teams have been a key benefit of HCH**

Year	Target Population	Report Focus	Key Findings
			• Health Coach and Health Improvement Practitioner (HIP) bring a coordinated wellbeing focus and social worker presence seen as having a lot of value, as well as use of Medical Care Assistants to free up clinical time by carrying out basic procedures • Plus, Pacific navigator was seen as a useful role o <u>Achieving the stated goals of HCH</u>: ▪ Key **'trade-offs' between HCH efficiency measures to increase capacity, and dimensions of quality care**, may be involved for practices delivering the HCH model of care to high need Pacific populations • **Increase in workloads in relation to ManageMyHealth and phone triage may be cancelling capacity gains** from e.g. pre-work (*will this get better with time as the HCH model is fully implemented?*) • **Patients still felt they had no choice but to use an emergency service when an urgent appointment was not available** • **Applying a pro-equity lens is important for managing healthcare seeking behaviours, patterns of service utilisation, and valued dimensions of care** for Pacific and other high needs populations – these need to be better understood and **would benefit from deeper examination** • There is a "tension between HCH efficiency measures to increase capacity and dimensions of quality care for practices delivery care to high need populations (p. 39) ▪ **'Whole of practice' strategies are essential to engage and meet the cultural needs of Pacific patients** and families • "Meeting the specific needs of a large, high need Pacific population has required some adaption of HCH delivery" (p. 33) • Need effective engagement approaches and culturally appropriate care e.g. Pacific Navigator (but some concerns around this with confidentiality as can be a person with a lot of community ties – explore other options) ▪ Enhanced and expanded practice teams improve practice effectiveness and contribute to addressing access barriers and providing dimensions of care that are important to Pacific peoples ▪ **HCH professional peer groups, multidisciplinary team meetings and intersectoral frameworks and mechanisms are building capability and driving change** and improvement within practices o <u>Meeting the needs of Pacific people and their families</u>: ▪ **'Face to face' delivery remains an important aspect of care for Pacific people** • This is important in e.g. promoting proactive care by maximising what the patient can do when they are already in the practice as they might be less

Year	Target Population	Report Focus	Key Findings
			likely to come back if other services were not available on the same day – 'face to face' care provides openings for opportunistic engagement • Alternatives that are promoted in the HCH model can be inappropriate for high risk patients or those with health literacy and language needs • *This emphasises the importance of an equity lens and practices adapting to the needs of their populations* ▪ **Proactive follow-ups, reminders, and updates** help engage patients and families with health and social services • Reminders and follow ups were welcomed by patients, as well as proactive and sustained communication with extended team e.g. social worker ▪ **Continuity of care, underpinned by trusted relationships**, was highly valued by Pacific patients and families, especially those with long-term conditions and complex needs ▪ **Pacific patient and families have specific communication needs** that are closely interrelated to health literacy and language barriers • Including, for example, prevalence of long-term conditions and multimorbidity, and socioeconomic circumstances e.g. poor quality and crowded housing ▪ **Online solutions in health settings may not be effective for all Pacific patients** • Access to appropriate technology, digital literacy, resistance to digital modes in healthcare settings and generational factors were suggested as reasons for low uptake of patient portals by Pacific patients • **May create a 'digital divide' that exacerbates existing barriers to accessing care** o <u>Supporting practice staff to provide services for Pacific people and their families</u>: ▪ Support by the HCH Development Team has helped practices through a process of significant change and adjustment ▪ **Ongoing support from HCH/PHOs is needed to manage challenges in the delivery of proactive and preventative care** • Progress within HCH domains is varied and occurring at different paces and ongoing support needs to be tailored to reflect this ▪ Practices need support to ensure that trained and skilled translators or interpreters are available for consultations with Pacific patients and families • Key learnings: o **"Some of the key assumptions underpinning HCH domains and elements are not aligned with the realities of Pacific peoples"** (p. 39) o **MDT approaches critically important for providing proactive, coordinated, and timely care** for Pacific people

Year	Target Population	Report Focus	Key Findings
			○ HCH-enabled enhancements and expansions to practices teams are a key enabler for approaches central to the success of model of care for high need Pacific populations ▪ But **some clinical workloads have increased in a way that exacerbated pre-existing capacity issues, particularly for high needs population practices** ○ **HCH frameworks strengthen interdisciplinary and intersectoral coordination** and offer opportunities to deliver high quality, equitable care • Recommendations for HCH improvements include: ○ **Monitoring frameworks could be improved** to better consider the complex experience of high needs patients and Pacific patients and families – equity focus ▪ **Local knowledge about the health, social and cultural contexts of Pacific and high needs populations** and a strong presence in the community they serve is crucial to success for practices with high needs populations especially ▪ Cost limitations do put pressure on low cost practices as they have limited ability to offset the marginal costs of service delivery ○ **Enabling practices more scope to set the pace of change** ▪ To some extent this flexibility is already happening, but more needs to be done ○ Important to have **access to good quality data and reporting** ▪ Note: Indicator and monitoring frameworks updated as of June 2020 ▪ Consider the development of indicators that measure Pacific patient and family interactions with community-based services and the extent and range of outcomes from these interactions ○ **Build on the effectiveness of HCH-enabled enhanced and expanded practice teams** ▪ For example, Medical Care Assistants and other role which could be evolved and broadened to further build on the current gains experienced ▪ How could these newly established positions evolve to optimise the provision of equitable care for Pacific peoples? ○ **Develop strategies and approaches to ensure genuine access to patient portals for Pacific people** and others who have barriers to accessing information in that way
2020 *August*	Northland DHB region	Pae Ora – Healthy Futures: Evaluation Report on Third Year of HCH implementation (Canter-Burgoyne, 2020)	• **Practices tend to notice the benefits really starting to become apparent 3-5 years after implementation due to the time and effort required to effect real and sustainable change** ○ The change is incremental and does take time to demonstrate effect ○ "**Urgent unplanned care or acute demand needs to be managed firstly before clinicians have released capacity to commence work on Proactive Care**" (p. 3) ○ ***ASH rates for NHH practices are lower than non-NHH for Tranche 1 – the earliest adopters of the model, not the later ones*** • Review organised by PHO members who gathered the views of consumers, iwi, and other relevant groups, while completing a review of local population demographics,

Year	Target Population	Report Focus	Key Findings
			relationships/representations, and decision-making in relation to Māori, Pacific and other cultural groups • As with other studies, the local adaption of the HCH model – Neighbourhood Healthcare Home (NHH) has been associated with achievements which are not necessarily seen in non-NHH practices o E.g. visual **boards and daily huddles reported to lead to greater achievement** of health targets and team communication o **Clinical phone triage was provided over the last three years to more than 180,000 patients/whānau**, and this system lent itself well to the Covid-19 response ▪ **During the Covid-19 response, HCH practices readily made the transition** because of the systems, skills and flexibility already embedded as part of their HCH implementation ▪ **Almost 40% (39.6%) of GP triaged calls were resolved during the time of the call** for practices from Tranche 1 (earlier implementation), but resolution is lower for nurse triaged calls (but are an important component due to staffing capacity of GPs to ensure continuity of care) • Tranche 2 practices have a larger equity gap with 'Unable to contact' and could be correlated to the higher rates of Māori and high needs enrolled patients within these NHH practices – e.g. borrowing a phone from a family member and so not available later for the call back • So, Māori and higher needs patients need to be prioritised for call backs first o **Shared Care Planning and Kia Ora Vision, and extended hours, were rated as the most difficult to implement** ▪ Steady uptake of Kia Ora Vision and Whānau Tahi Shared Care planning across all practices, however ▪ But high cost in staff time to maintain shared care plans and this process needs to be reviewed to better enable whānau/patients to have the ability to lead their own care, with a stronger focus on whānau/patient co-design and input ▪ 86.5% of patients felt the current opening times were convenient, with 30.3% of patients suggesting the most convenient additional opening time is Saturday morning • The **provision of extended hours needs to be managed on a case by case scenario** for each practice o "**Patient portal activation is a better predictor of health outcomes than known socio-demographic factors such as ethnicity and age**" (Miller, 2020) ▪ **Patient portal activations in this study sit at around 50% for non-Māori and 30% for Māori**

Year	Target Population	Report Focus	Key Findings
			○ Key **enablers to implementing NHH for practices included funding, staff buy-in, education/training, continuous improvement processes, strong leadership, PHO support and good implementation** • <u>Challenges identified</u>: ○ Lack of data – **important to provide practices with data** that allows them to be aware of the issues and act accordingly ▪ **Inability to collect ethnicity data on call management** at present as well ○ **More support needed with how to apply equity practically** – e.g. holding same-day appointment slots for Māori, calling Māori patients back first etc., strengthening the whānau voice using the 'What Matter to Whānau' Kaupapa and drawing on learnings and insights from Māori Health Providers, plus supporting general practice in gaining confidence in growing and strengthening their relationships with Māori Health Providers and Iwi (especially in identifying whānau who are not yet enrolled anywhere) ○ **Cost is a barrier for whānau Māori when accessing forms of virtual care** e.g. patient portals – while MoH recently released Sponsored Data for key health websites, this does not support whānau who live rurally and remotely ○ Increased messaging with patients is not always associated with increased revenue for the practices, creating a tension ▪ **Number of annual GP consultations per person per year decreased with HCH implementation, reducing revenue from face-to-face consultations** ○ Survey fatigue from sending multiple patient surveys throughout the year – need to have a patient-led approach to developing surveys and asking the right questions, especially for Māori • <u>Recommendations</u>: ○ Need to **review the NHH model of care** as it is not easy to understand and segregates the model ○ **All general practices and Māori Health Providers should be supported to operate under the NHH model** – there should be guaranteed services available to all patients ○ **Contract measures should be more focused on improved whānau/patient outcomes with a deliberate equity lens, rather than inputs/outputs at a practice level** ○ There should be a focus on the **development on Kaupapa Māori models** to enhance the HCH/NHH model, and greater awareness of the different models between traditional general practice and Māori Health Providers – greater engagement with these Providers and Iwi required ▪ More work needs to be done on **gaining insight on what works for whānau Māori** and what does not, when using patient portals, allowing solutions to be driven by the consumer

Year	Target Population	Report Focus	Key Findings
			▪ More **community education** for whānau/patient and peer group support should be encouraged o There needs to be **on-going funding** for at least Years 4 & 5 of implementation of the model, as there is an increase in spending on reception, HCAs, with lower patient fees and ACC revenue across practices – **overall revenue is about 11% below what it would have been for non-HCH practices with enrolled populations of the of the same size** ▪ Funding should incentivise equity focus o **Better data needs to be available** from PHE/access to data dashboard and more PHE facilitator support in practice
2020 *August*	CCDHB (Wellington)	A Rapid Review of the Health Care Home Model in CCDHB (Ehrenberg, Terris, & Marshall, 2020)	• There **was a clear need to transform primary care and this model has provided a call to action** that now has coverage of 80% of CCDHB by the third year of implementation • While some changes were implemented rapidly and effectively, other focuses such as **proactive care and shared care plans have not been strongly embedded** • **An 'equity lens' has been missing** from the model to date, as a standard approach does not allow for the socioeconomic drivers of health and resulting inequities o "Improved access was viewed as contributing to reducing health inequalities. The ability to reduce inequities in access however is less clear. **Very little was reported in terms of reaching out to disengaged or more vulnerable people.**" (p. 36) o **Some changes have occurred progressively from 2016 to address this**, e.g. giving practices with larger high-need populations priority entry to programme, **allowing a higher per-capita amount for high needs patients and setting ethnicity specific targets** and data collection fields o **Voice of the patient not included in this evaluation** so unclear the extent of the effects on patients, but generally there are only isolated examples of projects and approaches within HCH practices with a specific focus on proactive engagement with high-needs people • Primary method was qualitative: interviews were conducted with 35 members of staff across 5 practices of varying location and levels of deprivation – but "voice of the patient not a direct component of this evaluation" (p. 37) • **"HCH is keeping people out of hospital … and providing better and more timely access to general practice when it is needed … Is it improving the quality of life and health in the community? Time will tell."** (p. 32) o HCH practices, including those with high needs populations, show a reduced rate of ED, ASH, and acute admission than what is expected based on past trends – but need to take this further to consider other regions of NZ as well o Māori also experienced lower ASH rates when enrolled at HCH practices • There seems to be a **good deal of agreement about the overall vision and way of working at the management level** from different groups, but more work to ensure buy-in from clinicians and

Year	Target Population	Report Focus	Key Findings
			ensuring that front-line staff really understand the rationale behind the model, so that they aren't participating simply "for the funding" o **Need to be careful that the model is not driven by providers, but rather the needs of the patients** • Overall **improvement in relationships with General Practices and between General Practices and Community Services**, with greater emphasis on teamwork and more well-rounded and responsive care for those with complex needs • There were **opposing views on the flexibility of the model**: o It was 'flexible' in that it enabled "practices to work within the framework but maintain their autonomy and ability to tailor their services to their community" (p. 18) o But inflexible in that practices were all at different starting points in capacity (e.g. with technology, back office, and management support), but received a standardised level of funding that was difficult especially for Very Low Cost Access (VLCA) practices to maintain ▪ HCH readiness assessment design was not equipped to assess provider infrastructure – needs to be a way of assessing that there is sufficient support infrastructure in place for all those participating in the model ▪ VCLA practices may not be able to sustain new roles introduced by the HCH model if the funding is discontinued in the future o Funding model meant practices and staff "had to fit in a box" (p. 18) and measures/outcomes were so specific that it made it hard to adapt the model to local needs o "**the model brought standardisation and efficiency, but now there is a need to address the variation in contexts and practices and a corresponding move towards more focussed support**" (p. 37) • **Huddles and data dashboards generally perceived as supporting a culture of continuous improvement** as well as other business efficiency components e.g. lean processes, workflow redesign, which are generally viewed positively if practices had the physical space and resourcing to e.g. make the reception phone free etc. • **Introduction of new roles was viewed positively, especially the Health Care Assistant (HCA) to better connect with patients** and provide continuous care, as well as freeing up nurse and GP time o **But VCLA practices may not be able to sustain these if HCH funding is discontinued** • **Great progress has been made in terms of technology and digital approaches** with e.g. virtual consults and shared patient portals, but more work is needed on this for shared care plans and overcoming the divide between health and social services • While the National Patient Experience survey does not show significant differences in patient experiences with calling the GP and booking appointments, interviews conducted for this study suggested that there is **greater engagement with patients who have same-day needs and GP**

Year	Target Population	Report Focus	Key Findings

			triage calls are an effective way to provide continuity to patients who might otherwise have gone to after-hours/hospital
			• **Introduction of MDTs is viewed as a crucial change**, and allowing virtual options has increased attendance, but there is **limited representation and input from community teams** at this stage – "MDTs [are] not quite realising their full potential" (p. 23)
			  o MDTs are not sufficient to rely on to build the link with community care
			• Tū Ora Compass' **risk stratification tool is available but has not been implemented successfully on a regular basis due to e.g. onerous process involved** and challenges in seeing the relevance ("just because they are high risk doesn't mean they need more GP input" p. 24)
			  o Similarly, the **Long Term Care and Year of Care Plan parts of the HCH model** were not being implemented successfully and **may need some adaptation**, e.g. onerous questionnaire, too much flexibility, taking out an hour of a patient's day
			  o Unable to measure the uptake of YoC plans between HCH and non-HCH practices as they only exist at HCH practices, but **analysis of Advanced Care Plans (ACPs) show that both VLCA and non-VLCA HCH practices are making faster progress than non-HCH practices**
			• **Mixed views on patient portal** – frees up some resources and gives patient more access to their own medical history, but **around 20% of patients aren't accessing it due to the 'digital divide'** – also some concerns about patients with complex needs, especially in mental health, having access to their notes and preventing clinicians from communicating sensitivities and potentially dangerous situations to one another
			  o **Data shows a high uptake for practices with a less proportion of high needs population**
			  o Over 100,000 people in CCDHB are now registered to use the patient portal – unable to obtain data that showed the uptake of the portal by ethnicity
			• While HCH practices are generally meeting their basic population health targets with immunisation and smoking (which has now been replaced by a diabetes target), it is **important to note that the selection process for the HCH programme involved practices having strong baselines to begin with**
			• **Extended hours** were recognised as clearly being of benefit to patients, but reported as **harder to implement** depending on the different practices' models
			• **Gap raised in terms of access to Mental Health Services** as local secondary mental health services have not yet engaged in the community services integration component of the HCH model
			• Could **consider having a co-located social worker and support team, and providing the option of house visits**
			• An **analysis of how workforce makeup has changed was not possible due to lack of data**
			• HCH practices were generally seen as **better equipped to manage changes due to Covid-19** as they had already adopted the necessary technology to allow them to carry out virtual consultations and staff from different parts of the system already knew each other due to the

Year	Target Population	Report Focus	Key Findings
			team work fostered by the model – HCH practices retained higher consultation rates than non-HCH practices during March-June 2020 (Covid-19 lockdown) • The **development of Community Health Networks is an opportunity to develop more localised adaptations** to allow for context in individual practices and communities – partnering with communities is a crucial step in reducing health inequities and better addressing social determinants of health, allowing stronger focus on population health • There is a **notable lack of community and consumer voice at the governance table to date** and more focus needs to be not just on providing care, but empowering people to manage their own care • Current measurements are not suitable for the move to broadening out to the community – e.g. **looking at measures of community resilience would be helpful**, and being careful that measures do not just become targets • Case studies referenced include: o Badalona model in Barcelona which provides centres that are not divided by type of centre (e.g. hospital, primary care, social care) but have a range of professionals and services. Population is stratified into 5 segments and care and resources is designed and allocated accordingly, as not everyone has the same level of need. o Community Health Centre Botermarkt in Belgium also includes an interdisciplinary team and service delivery focuses on accessibility (with no financial, geographical, or cultural threshold) and quality o NUKA System in Alaska is a model of health care run by Alaska Native people who chose to take full responsibility for their own health care, offering a range of services that include both conventional and traditional medicine and education etc. • "At a fundamental level, it is **undecided what funding there is beyond year 5 to continue the HCH programme**" (p. 50) • **What is needed overall for the HCH model is a "move to a tight/loose/tight model** of clear objectives and measures with flexibility and autonomy for local delivery" (p. 49), where "tight/loose/tight" means being: o **Clear** on the **objectives** o **Flexible** on **how** model is delivered o **Clear** on how you will **measure** the results • Overall, recommendations include: o **Reviewing objectives of HCH model to shift focus to proactive care, prevention, population health and social determinants of health** through integration with community o **Adapting to the needs of communities** and focusing on the most vulnerable – changing from a top-down approach

Year	Target Population	Report Focus	Key Findings
			○ **Identifying targeted community projects relevant** to population and need, establishing a networked governance model and considering new roles e.g. experienced patients and citizen partners ○ **Stronger focus on equity** with monitoring and using data to inform targeted responses ○ **Reviewing funding and support mechanisms** to reflect these new objectives ○ **Reviewing how MDTs can be used to plan more proactive care**, and the implementation of the risk stratification tool and YoC plans ○ **Including Mental Health and Aged Residential Care in future plans** ○ Continue **work towards electronic infrastructure**
2022	Southern Health District (Southern DHB and WellSouth)	15 interviews with staff from 7 general practices	• **Adaptable periphery**: Modification to some elements of the model (e.g., GP triage) was needed to match the practice needs and contexts (E.g., practice size, enrolled population, number of staff) • **Existing funding model for general practice** was described as barrier to fully realise the benefits of HCH, indicating that the fee-for-service model was not suitable for clinicians to see patients who need longer appointments. • **Introducing changes similar to those of the HCH concept** before formally adopting the HCH concepts was a positive implementation factor. • **Tension for change**: A perceived need for changes in general practices was a positive implementation factor. E.g., some practices that were preparing for the change process to manage acute demand found HCH tools such as GP triage very timely. • **Compatibility**: The HCH model did not work if multiple owners shared different views. Another compatibility issue was the tension with commission-based GP remuneration where practices pay GPs commission on the income they generate. • **Leadership**: Strong leadership in practices with organisational commitment was critical in driving change. The leadership team need to make time to meet and communicate decisions to staff. • **Available resources**: Funding support from local PHO was very helpful. It allowed practices some funded time to understand the HCH process and its benefits well. • **Access to knowledge and information**: Adequate orientation and training related to HCH tools and change management was necessary. There was confusion and resistance from staff, particularly GPs and nurses during the initial stage of implementation in almost all practices. **Collaboration** among practices, as well as between the PHO HCH team and practices, was also crucial. • **A detailed implementation plan with clearly developed targets and activities** was important but should be carried out in stages to avoid overwhelming impression from staff and practices. • **Whole-of-practice engagement** was crucial. The need for **ongoing practical support from the PHO HCH implementation team** was highlighted.

Year	Target Population	Report Focus	Key Findings
			• The execution of the HCH model in some practices was affected by COVID-19**. Some HCH elements require more implementation focus than others** (e.g., GP triage, daily huddles, patient portal, and LEAN principles). • Of particular note to the context-specific implementation, **practice size matters**. Smaller practices will likely have less resources and need greater PHO implementation support.

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